STANDARDIZATION OF WORK MEASUREMENT

**Defense
Work
Measurement
Standard
Time
Data
Program**

VOLUME X

UNIVERSAL

(COMMON TO TWO OR MORE OCCUPATIONS)

April 1977

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OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
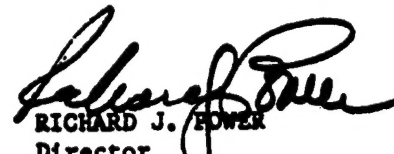WASHINGTON, D. C. 20301

INSTALLATIONS AND LOGISTICS

15 Apr 77

FOREWORD

This volume of DoD 5010.15.1-M, "Standardization of Work Measurement",
is one of a series published under the authority of DoD Directive
5010.31, Productivity Enhancement, Measurement, and Evaluation. It
provides standard time data for Universal Occupations and includes
guidelines for uniform application.

Maximum use of the guidelines and standard time data is mandatory
at each Department of Defense activity where Labor Performance
Standards are developed and applied.

All of the included standard time data have been reviewed and approved
by a Joint Service/Agency Standard Time Data Group prior to publication.

RICHARD J. POWER
Director
Defense Industrial Resources
Support Office

DISTRIBUTION
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This DoD manual supersedes DoD 5010.15.1-M, Volume X, 9 Apr 74 and Change 1
*Denotes Changes

DEFENSE WORK MEASUREMENT STANDARD TIME
DATA PROGRAM (DWMSTDP)

STANDARD TIME DATA FOR
UNIVERSAL APPLICATION

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DEFENSE WORK MEASUREMENT STANDARD TIME
DATA PROGRAM (DWMSTDP)

UNIVERSAL

PART ONE - GUIDANCE

CHAPTER I - GENERAL INFORMATION

1.1 PURPOSE

This volume of Universal Standard Time Data is one of eleven volumes included
in DWMSTDP. It is termed "Universal" because it provides a single DoD source
for standard time data elements which can be used in the development of labor
standards in several occupation categories.

1.2 SCOPE

This publication applies to all military services and defense agencies. The data
contained herein will be used to the maximum extent possible in the development
of labor performance standards.

1.3 APPLICATION

The Universal Standard Time Data contained in this volume are to be applied in
accordance with the general instructions contained in the Basic Volume and the
specific instructions contained in this volume.

1.4 SUBMISSION OF NEW ELEMENTS

All newly developed or existing Universal Standard Time Data elements not now
included herein should be submitted with back-up motion pattern analysis to the
Defense Industrial Resources Support Office (DIRSO), for review,   *
coordination, and inclusion in the updating changes to this volume. The Basic
Volume contains procedures for submitting these data elements.

CHAPTER II - CODING

2.1 GENERAL

* 2.1.1 Information requirements applicable to DWMSTDP have been standardized. Applicable DoD Standard Data elements have been utilized and all other data elements have been proposed for data representation standardization action in accordance with the provisions of DoD Instruction 5000.15, "Data Elements and Codes Standardization Procedures" and DoD 5000.15-M.

2.1.2 The complete coding structure for a Defense Work Measurement Standard Time Data element is explained in the Basic Volume. Figure 1 highlights the Occupation Code, the Work Category Code, and the Work Sub-Category Code of a Universal element.
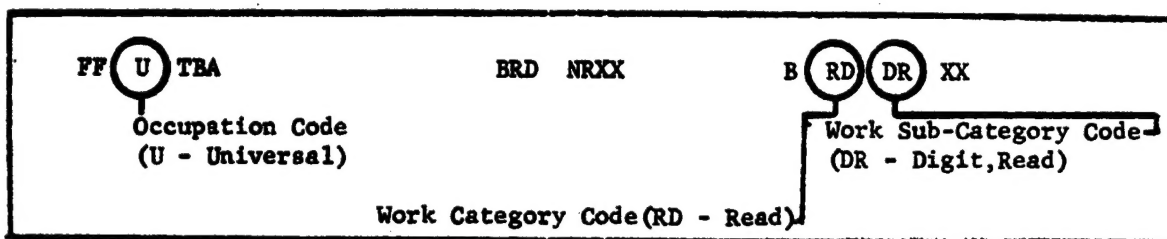

Figure 1 - DWMSTDP Coding Structure

2.2 TYPES OF CODES

2.2.1 Occupation Code

The Occupation Code "U" (for Universal) is used for standard time data elements in this volume. This code identifies general purpose elements such as get, place, read, write, which are found in a broad spectrum of occupations but are not specific to any.

2.2.2 Work Category Code

The two position Work Category Code encircled in Figure 1 further identifies the various types of work performed within the occupation groups. This classification category indicates the major action being performed or major equipment involved in the standard time data element. Figure 2 lists and defines the work categories used in coding Universal Standard Time Data.

2.2.3 Work Sub-Category Code

The two position Work Sub-Category Code encircled in Figure 1 is a sub-division of the Work Category Code and identifies the object, process, or condition associated with the action or equipment. This code is generally oriented to a noun-verb relationship, e.g., DR is the code for "Digit, Read" in the element description header line. However, where the element consists of general purpose data or if the noun-verb sequence causes a duplication of the code, the work sub-category sequence is modified, e.g., MIDSAXX-Stamp(Rubber),Apply, MIDSA01-Stencil,Apply. The noun-verb sequence will remain in the verbage of the element whenever possible.

UNIVERSAL WORK CATEGORY CODES

Work Category	Code	Definition
Actuate	AC	Manual manipulation of an object for engaging, disengaging, starting, or stopping a device. (Examples: crank, dial, set with knob, move lever.) The process of manipulating an object by cranking, turning, or moving through a fixed part. Putting something else in action by handling a switch or control.
Body Motion	BM	Gross foot, leg, and body movement (other than basic manual and eye motions. (Examples: leg motion, horizontal change, sit and stand, vertical change, walk.)
Clean	CL	The removal of foreign matter by chemical, mechanical, or manual process. (Examples: ultrasonic cleaning, abrasive cleaning, solvent, rubbing, wiping, sweeping.)
Clamp	CP	The actions required to accomplish the non-manual holding of object(s) with a clamp when required for repairing, modifying, manufacturing or assembly operations (Examples: "C", cleco, spring, hose, cable, conduit, etc.).
Disassembly/Assembly	DA	The action(s) required to remove, install or replace assemblies or components parts when the primary purpose is to place an object(s) or part(s) on or into another object or part so that they fit, connect or are secured to each other to form a unit. These actions do not include fabrication of parts or items. This category generally applies to special or higher level data.
Dip	DP	Motions necessary to dip or immerse an object in liquid or paste and/or remove excess. (Examples: dip brush, cloth, stick, parts, dip hand, finger.)
Elemental	EL	Miscellaneous manual motions and factors not included in the get and body motion tables. (Examples: apply pressure, disengage, weight factors.)

Figure 2 - Major Categories of Work Used in Coding Universal Data

UNIVERSAL WORK CATEGORY CODES

Work Category	Code	Definitions
Equipment - Transport Vehicle	EV	The operation or preparation for use of any powered over-the-road transport vehicle for transportation of personnel or cargo. (Examples: automobile, bus, pickup truck, truck trailer, and railcar.)
Gauge and Measure	GM	The procedure by which the size, amount, extent, or capacity of an item is determined. (Examples: bisect, gauge, square, weigh.)
Get	GT	The combination of reaching and grasping motions to gain control of one or more object(s) using the hand(s) or fingers. (Examples: easily grasped object in fixed location, - in a variable location.)
Identify	ID	The process and motions required to stamp, tab, label, or mark documents, cards, folders, or objects to provide for locating, recognizing, or comparing. The actions necessary to recognize, match, or compare similar characteristics.
Inspect and Test	IT	The procedure or action by which an item is subjected to comparisons or measurements to determine its qualities for use. (Examples: use of bore indicating gauge, use of feeler gauge, use of micrometers, eye times, check mandrel for run-out.)
Job Preparation	JP	The actions required to prepare an object(s), work place, or employee(s), or any combination of the three for ensuing work. NOTE: Excluded from this category are layout, packaging, and machine setup.
Layout	LO	Laying out straight lines or radii including drawing or scribing on any appropriate material. (Examples: measuring with scale or tape to locate points by intersecting lines, chalk line layout, surface preparation using layout dye.)
Lubricate	LU	The application of a lubricant using fingers or lubricating device. (Examples: brush, grease gun, oil can, tube.)

Figure 2 - Major Categories of Work Used in Coding Universal Data (Continued)

UNIVERSAL WORK CATEGORY CODES

Work Category	Code	Definitions
Materials Handling - Devices	MH	The process of locating, relocating, positioning, and aligning mechanical devices such as conveyors, pallet jacks, hoists, carts, slings, etc., for the purpose of moving objects or moving the device out of the way.
Non-threaded Fastener	NF	The permanent or semi-permanent holding or locking of mating objects by other than threads or clamping actions.
Office General	OG	The processes and motions covering a large variety of actions commonly occurring in any office which have not been included in other categories.
Object Handling	OH	The process of manually moving an object for the purpose of changing its location or alignment. The movement path may or may not be fixed.
Paint	PA	To cover a surface by applying and spreading a liquid or paste with a brush, spray gun, or roller. (Examples: paint, varnish, lacquer, shellac, wax.)
Paper Handling	PH	The processes and motions involved in the securing, movement, placement, and alignment of paper, cards, sheets, etc.
Package	PK	Preparing an object for shipping or storing or removing object from shipping or storing condition.
Place	PL	The combination of motions to transport and place an object(s) using the hand(s) or fingers. (Examples: place approximate, place close - not symmetrical.)
Read	RD	Perception and comprehension of readily distinguishable words, letters, or numbers. (Examples: read individual word or number, read sequence of words.)
Surface Treatment	ST	The application of chemicals to an object when the predominant purpose is to change the composition of its surface.

Figure 2 - Major Categories of Work Used in Coding Universal Data (Continued)

UNIVERSAL WORK CATEGORY CODES		
Work Category	Code	Definition
Threaded Fastener	TF	Tightening or loosening a threaded object such as a bolt, nut screw, or hand-knob by hand. (Examples: finger turn-per thread, spin tighten or loosen - moderate pressure.
Tool, Use, Hand Operated - Non-Powered	TL	The use or preparation for use of any non-powered implement, instrument or utensil held in the hand and used for cutting, hitting, digging, rubbing, etc. (Examples: knife, saw, hammer, shovel, rake, prybar, needle for sewing.)
Tool, Use, Hand Held - Powered	TP	The use or preparation for use of any hand-held tool which derives its primary power for operation from a source other than the operator or user. (Examples: electric portable saw, portable pneumatic wrench.)
Vising	VS	The action required to accomplish the non-manual holding of object(s) - (with a vise) while repaird, modifications, or manufacturing operations are being performed. (Examples: tighten or loosen vise, rotate vise, quick acting vise.)
Wire Handling	WH	Elements of work associated with the buildup, installation or repair of circuitry such as electrical, electronic or telephonic.
Write	WR	Writing or freehand printing numbers, letters, or punctuation of average readable quality and normal size or less than 1" height. (Examples: write letter - longhand, punctuate, write signs.)

Figure 2 - Major Categories of Work Used in Coding Universal Data (Continued)

CHAPTER III

UNIVERSAL DWMSTDP FUNDAMENTAL ELEMENTS

3.1 FORMATTED ELEMENTS

The elements are listed in tabular/chart formats for easier use of selected, highly repetitive, common standard time data elements. This type of format is intended for use by analysts/technicians trained in the application of standard time data who do not need to refer to the descriptive element. These same elements are also included in the element listing of the volume (Part Two, Section D), for use by other analysts/technicians not as familiar with applying standard time data to the development of labor standards.

DWMSTDP FUNDAMENTAL ELEMENTS

MULTI GET   TGTOGXX

DESCRIPTION		CASE CODE	f / A	1-3 / B	3-9 / C	9-15 / D	15-21 / E	21-27 / F
EASY	Variable	A	8	13	22	30	38	47
	Loose	B	16	21	31	40	49	59
	Close	C	26	31	42	50	60	70
	Exact	D	53	58	68	77	86	97
	Other Hand	E	14	17	27	36	44	54
	Threaded Fastener	F	32	37	47	56	65	75
JUMBLED	Variable	G	15	22	30	38	47	55
	Loose	H	23	30	39	48	58	67
	Close	J	33	40	50	58	69	78
	Exact	K	60	67	76	85	95	105
	Other Hand	L	21	26	35	44	53	62
	Threaded Fastener	M	39	46	55	64	74	83
SIMO JUMBLED	Variable	N	26	33	41	49	58	66
	Loose	P	34	41	50	59	69	78
	Close	R	44	51	61	69	80	89
	Exact	S	71	78	87	96	106	116
	Threaded Fastener	T	76	83	92	101	111	120

BASIC GET   TGTOOXX

DESCRIPTION		CASE CODE	f / A	1-3 / B	3-9 / C	9-15 / D	15-21 / E	21-27 / F
CONTACT	Fixed	A	2	4	7	10	12	15
	Variable	B	2	4	9	13	17	22
EASY	Fixed	C	6	8	11	14	16	19
	Variable Location	D	6	8	13	17	21	26
	Additional Object	E	17	19	--	--	--	--
JUMBLED	One Hand	F	13	17	21	25	30	34
	Simo	G	24	28	32	36	41	45
	Additional Object	H	24	28	--	--	--	--
	Handful	J	33	35	39	44	48	52

BASIC PLACE - TPLOPXX

DESCRIPTION		CASE CODE	POS Only / A	f / B	1-3 / C	3-9 / D	9-15 / E	15-21 / F	21-27 / G
APPROX	Location	A	-	2	5	9	13	17	21
	Location-w/press	B	-	13	15	20	24	28	31
LOOSE	Symmetrical	C	6	8	11	16	21	26	31
	Not Symmetrical	D	9	11	14	19	24	30	35
CLOSE	Symmetrical	E	16	18	21	27	31	37	42
	Not Symmetrical	F	20	22	25	30	35	40	45
EXACT	Symmetrical	G	43	45	48	53	58	63	69
	Not Symmetrical	H	47	49	52	57	62	67	72
OTHER HAND		J	6	8	9	14	19	23	28
START THREADED FASTENER	Visible	K	-	26	29	34	39	44	49
	Blind	L	-	60	63	68	73	78	83

BASIC ELEMENTAL			CODE	TMU
APPLY PRESSURE	Case 1		BEL-AP-01	16
	Case 2		BEL-AP-02	11
DISENGAGE	Loose		BEL-DE-01	4
	Close		BEL-DE-02	8
	Tight		BEL-DE-03	23
REGRASP			BEL-RG-01	6
EYE FOCUS			BEL-EF-01	7
EYE TRAVEL	Per Inch at 15" from the Eyes		BEL-ET-01	1
	Per Foot at 30" from the Eyes		BEL-ET-02	6
TURN WRIST	Turn Only	Up to 90°	BEL-TW-01	4
		90° to 180°	BEL-TW-02	7
		Up to 90° w/pressure	BEL-TW-03	15
		90° to 180° w/pressure	BEL-TW-04	18
	Shift Grasp and Turn	Up to 90°	BEL-TS-01	12
		90° to 180°	BEL-TS-02	19
		Up to 90° w/pressure	BEL-TS-03	23
		90° to 180° w/ pressure	BEL-TS-04	29
EXTENSION OF DISTANCE FOR REACH/MOVE PER 10"			BEL-ED-01	7

MULTI PLACE - TPLOGXX
Get, Place to Use and Aside

DESCRIPTION		CASE CODE	f / A	1-3 / B	3-9 / C	9-15 / D	15-21 / E	21-27 / F
EASY GET	Variable	A	10	18	31	43	55	68
	Loose	B	18	26	40	53	66	80
	Close	C	28	36	51	63	77	91
	Exact	D	55	63	77	90	103	118
JUMBLED GET	Variable	E	17	27	39	51	64	76
	Loose	F	25	35	48	61	75	88
	Close	G	35	45	59	71	86	99
	Exact	H	62	72	85	98	112	126

TABULAR ELEMENTAL   - TELWFXX

EFFECTIVE NET WEIGHT (ENW)		CASE CODE	WEIGHT FACTOR FIRST (Static & Dynamic) A	Additional (Dynamic Only) B
2 1/2 - 10 Lbs.		A	3	1
10 - 20 Lbs.		B	8	2
20 - 30 Lbs.		C	12	3
30 - 40 Lbs.		D	17	4
40 - 50 Lbs.		E	22	6

OWAS/STDP FUNDAMENTAL ELEMENTS

BASIC READ			CODE	THU
WORDS IN SEQUENCE	PER WORD		BRD-WS-01	5
Word - Individual			BRD-WI-01	7
Number	1 thru 5 Digits	First Digit	BRD-NR-01	12
		Each Add'l	BRD-NR-02	5
	6 thru 12 Digits	First 6 Digits	BRD-NR-03	55
		Each Add'l	BRD-NR-04	7
	Fractions, Decimals	First Char	BRD-DR-01	14
	Mixed Alpha/Numerics	Each Add'l	BRD-DR-02	9

BASIC/MULTI-WRITE			CODE	THU
Letter	Longhand	Lower Case	MWR-LL-01	15
		Upper Case	MWR-LL-02	23
	Printed	Lower Case	MWR-LP-01	18
		Upper Case	MWR-LP-02	23
Move to Start Next Word-Long Hand - Lower Case			MWR-MO-01	8
Number	Per Digit		MWR-NO-01	18
Symbol	Check Mark		MWR-SW-01	17
	Multiply, Add, Equal, or Ampersand Sign		MWR-SW-02	19
	Division Sign or Single Bracket		MWR-SW-03	25
	Percent, Dollar, or Radical Sign		MWR-SW-04	33
	Brace		MWR-SW-05	41
Punctu-ation	Period or Dot		MWR-PA-01	8
	Comma, Apostrophe, Line or Dash		MWR-PA-02	10
	Colon, Semi-Colon, or Exclamation		MWR-PA-03	17
	Parentheses, Ditto, Question or Quote		MWR-PA-04	19
	Asterisk		MWR-PA-05	29
Date	Print Month, Numerics for Day & Year		MWR-DW-01	136
	Write Month, Numerics for Day & Year		MWR-DW-02	122
	All Numerics With Dashes or Obliques		MWR-DW-03	110
Signature Longhand			MWR-SW-01	224
Words in Sequence - 5 Words				
Write or Print - Upper & Lower Case			MWR-WW-01	465
Print all Upper Case			MWR-WW-02	604

BASIC/MULTI-BODY MOTION				CODE	THU
Feet Motion (For PMP Add BBL-AP-02)				BBM-FM-01	9
Leg Motion	To 9" Travel			BBM-LM-06	7
	9" - 15" Travel			BBM-LM-12	14
	15" - 21" Travel			BBM-LM-18	22
Horizontal Change - Turn Body or Sidestep				BBM-HC-01	19
Vertical Change	Bend, Stoop, or Kneel and Arise			BBM-VC-01	61
	Kneel on Both Knees and Arise			BBM-VC-02	146
Sit and Stand	Chair Stationary			BBM-SS-01	108
	Chair Moved			BBM-SS-02	172
Walk	Obstructed	Per Pace		BBM-WO-01	17
	Unobstructed	Per Pace		BBM-WU-01	15
		Per Ten Feet		BBM-WU-02	53
Climb Ladder (Up and down)	Leaning	First Rung		BBM-CL-01	122
		Additional Rungs		BBM-CL-02	67
	Vertical	First Rung		BBM-LC-01	401
		Additional Rungs		BBM-LC-02	149

Position Change - TBM-PC-XX

		PACES	0	1	2	3	4	5	6	7
		CODE	A	B	C	D	E	F	G	H
Horizontal Change	A		19	36	53	70	87	104	121	138
Horizontal to Vertical	B		50	67	84	101	118	135	152	169
Vertical Change	C		80	97	114	131	148	165	182	199
		PACES	8	9	10	12	14	16	18	20
		CODE	I	J	K	L	M	N	O	P
Horizontal Change	A		155	172	189	223	257	291	325	359
Horizontal to Vertical	B		186	203	220	254	288	322	356	390
Vertical Change	C		216	233	250	284	318	352	386	420

MULTI-JOB PREPARATION			CODE	THU
Apron (Easy Reach)		Tie-String Type	MJP-AP-01	601
		Hook & Eye Type	MJP-AP-02	368
Coveralls		No Fasten/Unfasten	MJP-CP-01	1145
Goggles		Easy Reach	MJP-GG-01	183
Glasses, Safety	Put on and Remove	Easy Reach, Not in Case	MJP-GG-02	190
Shield, Safety		Easy Reach	MJP-GG-03	129
Gloves		Asbestos/Rubber-Loose	MJP-GP-01	256
		Rubber, Close Fit	MJP-GP-02	428
		Work, Cloth, Leather	MJP-GP-03	320
Jacket		No Fasten/Unfasten	MJP-JP-01	324
Ear Plug		Container Not Included	MJP-PP-01	685
Smock		Tie-Type, Fasten/Unfast.	MJP-SP-01	879

TABULAR/BASIC ACTUATE

CRANKING MOTIONS - TAC-CC-XX

	Crank Diameter in inches		
CASE	1-3	3-12	12-19
CODE	A	B	C
First Revolution **A**	15	19	21
Additional Revolution **B**	10	14	16
With Resistance **C**	26	30	33

MOVE MOTIONS - TAC-CM-XX

	Crank Diameter in Inches			
CASE	1-3	3-9	9-15	15-21
CODE	A	B	C	D
First Revolution **A**	8	18	34	49
Additional Revolution **B**	2	13	30	46
With Resistance **C**	13	24	41	58
Engage on Splines	BAC-CE-01	31		

Crank

MOVE ONLY - TAC-LM-XX

Distance Moved In Inches	CASE CODE	No Pressure A	With Pressure B
1-3	A	4	14
3-9	B	8	19
9-15	C	13	24
15-21	D	18	28
SEAT TO MESH GEARS		BAC-LS-01	16
UNLATCH OR LATCH, SQUEEZE TYPE		BAC-LU-01	13
UNLATCH OR LATCH, NON-SQUEEZE TYPE		BAC-LU-02	19

Lever

Knob Dial

Set Loose, 1/4" to 1/16" Tolerance	BAC-KD-01	13
Set Close, 1/16" to 1/64" Tolerance	BAC-KD-02	24
Set Exact, 1/64" or less Tolerance	BAC-KD-03	50

TABULAR/BASIC ACTUATE

MOVE RIM - TAC-VM-XX

Distance Rim Moved In Inches	CASE CODE	NO PRESSURE A	WITH PRESSURE B
1-3	A	4	14
3-9	B	8	19
9-15	C	13	24
15-21	D	18	28

SHIFT GRASP and Move Rim - TAC-WS-XX

Distance Rim Moved In Inches	CASE CODE	LIGHT RESISTANCE A	HEAVY RESISTANCE B
1-3	A	12	16
3-9	B	19	24
9-15	C	27	32
15-21	D	34	40
Position Dial or Pointer	Loose	BAC-WP-01	13
	Close	BAC-WP-02	24
	Exact	BAC-WP-03	46
JOG OR BUMP - Final Setting		BAC-WJ-01	18

Wheel

Switch

PUSH	No Pressure	To 1" Travel	BAC-SP-01	2
		1" - 2" Travel	BAC-SP-02	3
	With Pressure - to 2"		BAC-SP-03	13
TURN	Fingers		BAC-ST-01	3
	Wrist	No Pressure	BAC-ST-02	5
		With Pressure	BAC-ST-03	19

Valve

Petcock			BAC-VP-01	22
STEM		Final Tighten Revolution	BAC-VS-01	62
		Additional Revolution	BAC-VS-02	53

Depress Pedal — BAC-PD-01 — 33

BASIC INSPECT & TEST

		DESCRIPTION		CODE	THU
Caliper	Open or Close	24" Firm Joint	20"	BIT-CO-01	48
		8" Spring	4"	BIT-CO-02	224
	Set with Scale	24" Firm Joint	within	BIT-CS-01	391
		8" Spring	1/16"	BIT-CS-02	215
	First Dimension	8" Spring	inside	BIT-CU-01	405
			outside	BIT-CU-02	363
		24" Firm Joint	inside	BIT-CU-03	875
			outside	BIT-CU-04	539
	Use	Vernier	under 12"	BIT-CU-05	293
			over 12"	BIT-CU-06	592
	Additional Dimension	Vernier	inside or outside	BIT-CU-07	92
Dial Indicator	Set to Zero			BIT-IS-01	49
	Check per position			BIT-DI-01	26
	Bore indicator, per diameter			BIT-BI-01	20
	Check Height, Flat Surface, 1st in.			BIT-IU-01	14
	Check Height, Flat Surface, Add in.			BIT-IU-02	10
	Check Mandrel Run Out, per Dia.			BIT-MR-01	95
	Check with Snap gauge, per position			BIT-SN-01	26
	Read, per Check			BIT-IR-01	44
Feeler Gauge	Select 1st leaf, fan type			BIT-FE-03	89
	Select Add. leaf, fan type			BIT-FE-04	38
	Check, per spot, position, or 1st in			BIT-FE-01	28
	Check, additional inch			BIT-FE-02	9
Plug Gauge	Check	Size Only	Go End	BIT-PG-01	31
			No Go End	BIT-PG-02	27
		Size & Depth		BIT-PG-03	34
Grinder Gauge	Check outside diameter			BIT-GO-01	20
Ring Gauge	Per Check			BIT-GU-01	428
Flush Pin Gauge	Per Check			BIT-FP-01	8
Eye	Travel, point to point	Less than 1"		BIT-ET-01	8
		1"-3"		BIT-ET-02	9
		3"-9"		BIT-ET-03	13
		9"-15"		BIT-ET-04	19
		15"-21"		BIT-ET-05	25
		21"-27"		BIT-ET-06	27

MULTI - OBJECT HANDLING			CODE	THU
Pencil, Scribe or Scale		Get from shirt pocket	MOH-OG-01	65
		Place in shirt pocket	MOH-OP-01	73
Object	Pick up and set down	0-35 lbs	MOH-PO-01	155
		35-45 lbs	MOH-PO-02	176
		45-55 lbs	MOH-PO-03	186
		55-65 lbs	MOH-PO-04	255
		65-75 lbs	MOH-PO-05	268

DWMSTDP FUNDAMENTAL ELEMENTS

BASIC THREADED FASTENER			CODE	TMU
Finger Turn	Move Only	to 1 1/2"	BTF-FM-01	3
		1 1/2" - 2 1/2"	BTF-FM-02	4
		2 1/2" - 3 1/2"	BTF-FM-03	5
	Shift Grasp & Move	To 1 1/2"	BTF-FS-01	10
		1 1/2" - 2 1/2"	BTF-FS-02	12
		2 1/2" - 3 1/2"	BTF-FS-03	14
	Per Thread	To 1/4"	BTF-FT-01	4
		1/4" - 3/4"	BTF-FT-02	11
		3/4" - 1 3/4"	BTF-FT-03	23
		1 3/4" - 3 1/4"	BTF-FT-04	37
Start Threaded Fastener	Visible	less than 1"	BTF-SV-01	26
		1" - 3"	BTF-SV-02	29
		3" - 9"	BTF-SV-06	34
		9" - 15"	BTF-SV-12	39
		15" - 21"	BTF-SV-18	44
		21" - 27"	BTF-SV-24	49
Move to Position	Blind	less than 1"	BTF-SB-01	60
		1" - 3"	BTF-SB-02	63
		3" - 9"	BTF-SB-06	68
		9" - 15"	BTF-SB-12	73
		15" - 21"	BTF-SB-18	78
		21" - 27"	BTF-SB-24	83
Spin			BTF-SS-01	10
Loosen or Tighten			BTF-TM-01	18
Washer, Place on screw or bolt		to 1" length	BTF-WP-01	26
		1" - 3" length	BTF-WP-02	35
Wrist Turn	Turn Only	90° turn	BTF-WT-01	5
		120° turn	BTF-WT-02	7
		180° turn	BTF-WT-03	9
	Shift Grasp & Turn	90° turn	BTF-WS-01	15
		120° turn	BTF-WS-02	18
		180° turn	BTF-WS-03	23
	Per Revolution	90° turn	BTF-WR-01	39
		120° turn	BTF-WR-02	53
		180° turn	BTF-WR-03	46

MULTI NON-THREADED FASTENER			CODE	TMU
Lock (Latch)	Close and Lock	Padlock,key,attach & lock	MNF-LC-01	65
		Padlock,comb,attach & lock	MNF-LC-02	159
		Mount, 0°-90° key turn	MNF-LC-03	49
		Mount, 90°-360° key turn	MNF-LC-04	77
		Mount, Comb.	MNF-LC-05	109
		Suitcase Type Latch	MNF-LC-06	91
		Hook & Eye Type Latch	MNF-LC-07	46
	Open and Move Aside	Padlock,key	MNF-LO-01	163
		Padlock,Comb.	MNF-LO-02	388
		Mount, 0°-90° key turn	MNF-LO-03	96
		Mount, 90°-360° key turn	MNF-LO-04	149
		Mount, Comb.	MNF-LO-05	317
		Hasp Type Latch	MNF-LO-06	77
		Slide/Swing Type Latch	MNF-LO-07	26
		Cam Type Suitcase Latch	MNF-LO-08	38
		Turn Latch	MNF-LO-09	21
		Hook & Eye Type Latch	MNF-LO-10	38
Staple	Install	W/Plier Grip Stapler	MNF-SI-01	51
	Remove	3/8", 1/2", Plier Type Remover	MNF-SR-01	86

TABULAR NON-THREADED FASTENER - TNFNSXX				
Nail, Set and Drive			Size of Nail	
			5-7-8	10-12-16
		CASE CODE	A	B
First Nail		A	422	529
Each Additional Nail		B	182	285

MULTI THREADED FASTENER			CODE	TMU
Get (Easy) and Start (Visible)	Move Only	To 1"	MTF-FG-01	32
		1" to 3"	MTF-FG-02	37
		3" - 9"	MTF-FG-06	47
		9" - 15"	MTF-FG-12	56
		15" - 21"	MTF-FG-18	65
		21" - 27"	MTF-FG-24	75
Get (Jumbled) and Start (Visible)		To 1"	MTF-FP-01	39
		1" - 3"	MTF-FP-02	46
		3" - 9"	MTF-FP-06	55
		9" - 15"	MTF-FP-12	64
		15" - 21"	MTF-FP-18	74
		21" - 27"	MTF-FP-24	83
Get (Jumbled Simo) and Start (Visible)		To 1"	MTF-FS-01	76
		1" - 3"	MTF-FS-02	83
		3" - 9"	MTF-FS-06	92
		9" - 15"	MTF-FS-12	101
		15" - 21"	MTF-FS-18	111
		21" - 27"	MTF-FS-24	120

MULTI VISING			CODE	TMU
Vise	Quick Acting Rotate	Loosen	MVS-QA-01	24
		Tighten	MVS-QA-02	35
		to 45°	MVS-RV-01	81
		45° - 135°	MVS-RV-02	89
	Open or Close	Sm. to 9" HDL. DIA.	MVS-TL-01	31
		Md. 9"-15" HDL. DIA.	MVS-TL-02	39
		Lg. 15"-21" HDL. DIA.	MVS-TL-03	47

MULTI CLAMPING				CODE	TMU
Clamp	C-Type	Install and Remove		MCP-CI-01	322
		Tighten or Loosen		MCP-CT-01	75
	Cleco	Remove		MCP-CL-01	55
		Install	Up to 15"	MCP-CL-06	82
			15" to 27"	MCP-CL-18	92
	Spring	Install/ Remove	Sm. to 1" move	MCP-SP-01	20
			Lg. 1"-3" move	MCP-SP-02	26
Jaw, Parallel Tighten or Loosen		Screwdriver Handle		MCP-PJ-01	112
		Knurled Knob		MCP-PJ-02	50

BASIC TOOL USE			CODE	TMU
Pry Bar	Object Move	Less than 1"	BTL-BP-01	20
		1" - 3"	BTL-BP-02	25
		3" - 9"	BTL-BP-06	34
		9" - 15"	BTL-BP-12	43
Chisel (Cold)	First or Single Blow		BTL-CU-01	72
	Additional Blow		BTL-CU-02	17
File or Hack Saw	Per Stroke		BTL-FU-01	37
Hammer (Light, 2 1/2 lbs.)	Strike One Blow (up and down stroke)	1" - 3" Stroke	BTL-HL-02	8
		3" - 9" Stroke	BTL-HL-06	17
		9" - 15" Stroke	BTL-HL-12	26
		15" - 21" Stroke	BTL-HL-18	35
		21" - 27" Stroke	BTL-HL-24	43
Hammer (Medium, 2 1/2 - 7 1/2 lbs.)		1" - 3" Stroke	BTL-HM-02	9
		3" - 9" Stroke	BTL-HM-06	18
		9" - 15" Stroke	BTL-HM-12	28
		15" - 21" Stroke	BTL-HM-18	37
		21" - 27" Stroke	BTL-HM-24	46
Hatchet	First or Single Blow		BTL-HU-01	42
	Additional Blow		BTL-HU-02	32
Knife	Per Stroke	To 1" Stroke	BTL-KU-01	16
		1" - 3" Stroke	BTL-KU-02	20
		3" - 9" Stroke	BTL-KU-06	28
Pliers (Conventional)	Lt. Resist. - to 30 lbs.		BTL-PC-01	15
	Hvy. Resist. - 30 - 45 lbs		BTL-PC-02	20
Pliers (Vise Grip)	Close on object and open to remove		BTL-PC-03	65
Screw Driver	Conventional	Engage & Disengage	BTL-SC-01	23
		Finger Turn - Per Move - To 3/4" DIA	BTL-SC-02	8
		Finger Turn - Per Move - 3/4"-2" DIA	BTL-SC-03	12
		Finger Turn - Per Thread - To 3/4" DIA	BTL-SC-04	21
		Finger Turn - Per Thread - 3/4"-2" DIA	BTL-SC-05	31
		Wrist Turn - Per Move	BTL-SC-06	18
		Wrist Turn - Per Thread	BTL-SC-07	53
	Ratchet	Move Turn - Per Move	BTL-SR-01	9
		Move Turn - Per Thread	BTL-SR-02	23
		Wrist Turn - Per Turn	BTL-SR-03	14
		Wrist Turn - Per Thread	BTL-SR-04	41
	Final Tighten/Initial Loosen		BTL-SU-01	31
Scissors/ Shears	Small	to 2" cut, One Hand, to 2 1/2 lbs res.	BTL-SS-01	11
	Large	2-4" cut, two Hands to 5 lbs res.	BTL-SS-02	13
To Tap or Die	Wrist Turn	Cut - Per Thread	BTL-TD-01	67
		Remove - Per Thread	BTL-TD-02	46
	Move Turn - to 6" handle	Cut - Per Thread	BTL-TD-03	102
		Remove - Per Thread	BTL-TD-04	63
	6"-10" handle	Cut - Per Thread	BTL-TD-05	140
		Remove - Per Thread	BTL-TD-06	85
T-Handle	Engage and Disengage		BTL-WH-01	26
	Spin - Per Hand Sequence		BTL-WH-11	15
	Per Thread	Wrist turn	BTL-WH-12	46
		Move turn	BTL-WH-13	68
Rachet & Socket - Engage/Disengage			BTL-WR-01	26

BASIC TOOL USE					CODE	TMU
Speed Handle	Engage/Disengage Socket				BTL-WS-01	31
	Turn One Thread 3-6" DIA				BTL-WS-02	12
Wrench Torque	Set Torque	Dial Type			BTL-WT-01	37
		Snap Type			BTL-WT-02	98
	Final Tighten	Snap Type	7"-12" HDL, 5/16" THRD.		BTL-WT-51	39
			12"-16" HDL, 5/16"-1/2" THRD.		BTL-WT-52	45
		Dial Type	7"-12" HDL, 5/16" THRD.		BTL-WT-61	55
			12"-16" HDL 5/16"-1/2" THRD		BTL-WT-62	61

MULTI TOOL USE		CODE	TMU
Die or Tap	Assemble Tap in Chuck	MTL-DA-01	98
	Disassemble Tap from Chuck	MTL-DA-02	77
	Assemble Tap in Handle	MTL-DA-03	139
	Disassemble Tap from Handle	MTL-DA-04	110
	Assemble Die in Handle	MTL-DA-05	150
	Disassemble Die from Handle	MTL-DA-06	122

TABULAR TOOL USE - SCREWDRIVER - TTLSPXX

		Length of Stroke (Inches)				
		2	3	4	5	6
	CASE CODE	A	B	C	D	E
Per Stroke	A	10	12	15	17	19
Per Thread	B	10	8	7	7	6

NOTE: Applies to resistance on the down stroke of up to 7 1/2 lbs. K, N, W.

TABULAR TOOL USE - WRENCH - TTLWBXX

Thread Diameter (Inches) up to 5/8"		Degrees Turned Per Move			
		30°	60°	120°	180°
	CASE CODE	A	B	C	D
First Move	A	30	33	37	41
Additional Move	B	34	40	48	56
First Thread	C	404	233	133	97
Additional Thread	D	408	240	144	112
5/8" - 1 1/8"					
First Move	E	33	38	46	54
Additional Move	F	40	50	68	86
First Thread	G	473	288	182	139
Additional Thread	H	480	300	204	170

TABULAR TOOL USE - RATCHET - TTLWRXX

Ratchet Size, Type Motion - Move Motion 1/4" - 3/8" drive		Degrees Turned Per Move			
	CASE CODE	30°	60°	120°	180°
		A	B	C	D
Per Move	A	10	15	21	29
Per Thread	B	118	88	63	58
1/2" Drive					
Per Move	C	12	18	30	42
Per Thread	D	146	107	91	83
Wrist Turn Motion					
Per Turn	E	6	5	14	19
Per Thread	F	67	49	41	38

DWMSTDP FUNDAMENTAL ELEMENTS

MULTI CLEAN		CODE	TMU
Hands, Both	Wipe with Cloth/Paper Towel	MCL-HW-01	271
Hand, One		MCL-HW-02	160

TABULAR CLEAN - TCLOCXX							
Object, Clean Per Stroke to 2 1/2 lbs. Resist.		Distance Per 1-Way Stroke (Inches)					
		to 1"	1"-3"	3"-9"	9"-15"	15"-21"	21"-27"
	CASE CODE	A	B	C	D	E	F
W/O Pressure	A	4	9	18	27	34	41
W Pressure	B	15	20	28	37	45	52
2 1/2 - 10 lbs. Resistance One Way							
W/O Pressure	C	6	12	21	30	37	45
W Pressure	D	15	20	29	38	46	53
Both Ways	E	8	14	23	33	40	48
10 - 20 lbs Resistance One Way							
W/O Pressure	F	10	16	25	35	43	50
W Pressure	G	15	21	30	40	48	55
Both Ways	H	16	22	32	43	51	59

BASIC DIP			CODE	TMU
Cloth	Wring to Remove Excess Fluid		BDP-CW-01	38
Hand	Immerse, Remove, Shake		BDP-HI-01	40
Part (Without Cavities)	Immerse and Shake	Large, 10-30 lbs.	BDP-PI-01	73
		Medium, 5-10 lbs.	BDP-PI-02	48
		Small, to 5 lbs	BDP-PI-03	32
		Very Small	BDP-PI-04	23

TABULAR DIP TDPODXX				
Object, Liquid or Paste		Depth of Immersion (Inches)		
		to 1"	1" - 3"	3" - 9"
	CASE CODE	A	B	C
Average Immersion	A	4	9	18
Careful Immersion	B	10	14	24
Wipe After Immersion	C	4	10	21

BASIC LUBRICATE			CODE	TMU
Brush, Cloth Finger or Stick	Linear	to 6"	BLU-BL-01	11
		6" - 12"	BLU-BL-02	21
	Spot	Per spot	BLU-BS-01	4
		Per spot with care	BLU-BS-02	15
Grease Gun	Attach & Remove - Zerk Fitting		BLU-GA-01	148
		Button-Per Fitting	BLU-GB-01	34
		Lever-Per Stroke	BLU-GL-01	36
Oil Can	Apply Lube	Linear-Per Foot	BLU-OL-01	28
		Lever-Per Stroke	BLU-OS-01	18
		Diaphragm-Per Stroke	BLU-OS-02	15
Tube		Area-Per Sq. In.	BLU-TA-01	26
		Spot-1/4" Sq.	BLU-TS-01	20

DEFENSE WORK MEASUREMENT STANDARD TIME DATA PROGRAM
(DWMSTDP)

PART TWO - UNIVERSAL STANDARD TIME DATA

SECTION I - INDEXES

This provides two indexes as follows:

The DWMSTDP Element Index which is sequenced according to the DWMSTDP Element Code.

The Noun/Verb Index which is an alphabetical listing of the "title" line of the operation/element description.

NOTE: Indexes included in changes to this volume will be inserted in this section.

DEFENSE WORK MEASUREMENT STANDARD TIME DATA
ELEMENT INDEX

OCCUP-ATION	QUALITY	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	HBMHC01	19	HORIZONTAL CHANGE(SIDESTEP OR TURN BODY)	6
U	MAA	JBMLMXX	VARIABLE	LEG,MOVE,TO 21 INCHES	
U	MAA	BBMSSXX	VARIABLE	SIT AND STAND	
U	MAA	BBMVCXX	VARIABLE	VERTICAL CHANGE	7
U	MAA	BBMW001	17	WALK,UBSTRUCTED,PER PACE	
U	MAA	BRMWUXX	VARIABLE	WALK,UNOBSTRUCTED	
U	EUL	MBMAB01	576	AIRCRAFT,BOARD AND DISMOUNT	
U	MAF	MBMCLXX	VARIABLE	LADDER(EXTENSION),CLIMB AND DESCEND	
U	MAA	MBMLCXX	VARIABLE	LADDER(VERTICAL),CLIMB UP AND DOWN ONE RUNG OR STEP	
U	EUL	MBMTB01	701	TRUCK(PICKUP),BOARD AND DISMOUNT BACK END	
U	MAA	TBMPCXX	TABLE	POSITION,CHANGE	8
U	MAW	BCLDC01	61	DIAL,CLEAN WITH CLOTH	
U	MAW	BCLDW01	45	DIPSTICK,WIPE WITH CLOTH	
U	MAF	BCLPCXX	VARIABLE	PART,CLEAN WITH RAG	9
U	MAF	BCLSCXX		SURFACE,CLEAN WITH SCRAPER	
U	MAF	BCLSC05	476	SURFACE,CLEAN WITH WIRE BRUSH	
U	MAF	MCLSC06	160	SURFACE,CLEAN WITH AIR	
U	MAA	MCLACXX	VARIABLE	AREA,CLEAN WITH AIR,TO NINE SQUARE INCHES	
U	MAA	MCLBC01	194	BRUSH,CLEAN IN SOLVENT,SMALL BRUSH	
U	MAA	MCLCS01	351	COMPOUND(SEAL),SCRAPE OFF	10
U	MAA	MCLHC01	420	HANDS,CLEAN BY DIPPING IN FLUID CLEANER	
U	MAA	MCLHW01	271	HANDS,WIPE WITH CLOTH OR PAPER TOWEL	
U	MAF	MCLHW02	160	HAND,WIPE WITH CLOTH OR PAPER TOWEL	
U	MAA	MCLIC01	44	IRON(SOLDERING),CLEAN BY SHAKING	
U	MAF	MCLOCXX	VARIABLE	OBJECT,CLEAN WITH BRUSH,PER SQUARE FOOT	
U	MAL	MCLOC03	38	OBJECT,CLEAN WITH BRUSH AND SOLVENT	
U	OBW	MCLOWXX	VARIABLE	OBJECT,WASH	
U	OBW	MCLPCXX	VARIABLE	PART,CLEAN WITH AIR	11
U	MAA	MCLSCXX	VARIABLE	SURFACE,CLEAN,WITH BRUSH,MEDIUM RESISTANCE	
U	MAA	MCLSC03	1584	SURFACE,CLEAN WITH SANDPAPER	
U	MAF	MCLSC04	334	SURFACE,CLEAN WITH WIRE BRUSH,EMERY CLOTH AND RAG-PER FOUR LINEAR INCHES	
U	MAA	MCLSSXX	VARIABLE	SURFACE,SCRAPE TO CLEAN	
U	MAA	MCLSWXX	VARIABLE	SURFACE,WIPE WITH CLOTH	
U	MAA	TCLOCXX	TABLE	OBJECT,CLEAN,PER STROKE	12
U	TCA	TCLPCXX	TABLE	PART,CLEAN(BY HAND)WITH SOLVENT	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	SCLCRXX	VARIABLE	CORROSION,REMOVE FROM SPOT ON SURFACE	13
U	MAA	SCLCSXX	VARIABLE	SPOT,CLEAN ON FLAT OR IRREGULAR SURFACE WITH PICK AND AIR	
U	MAA	SCLSCXX	VARIABLE	SURFACE,CLEAN WITH SOLVENT AND CLOTH	
U	MAA	SCLSWXX	VARIABLE	SURFACE,WIPE WITH WET CLOTH	14
U	MAA	MCPCIO1	322	CLAMP(C TYPE),INSTALL AND REMOVE	
U	MAF	MCPCIO2	46	CLAMP(SPRING),INSTALL	
U	MAA	MCPCLXX	VARIABLE	CLAMP(CLECO),INSTALL OR REMOVE	
U	MAA	MCPCTO1	75	CLAMP(C TYPE),TIGHTEN OR LOOSEN	
U	MAA	MCPPJXX	VARIABLE	JAW(PARALELL),TIGHTEN OR LOOSEN	
U	MAA	MCPSPXX	VARIABLE	CLAMP(SPRING),INSTALL OR REMOVE,SMALL UR LARGE	15
U	MAA	SCPCIXX	VARIABLE	CLAMP,INSTALL AND REMOVE	
U	MAA	MDAPRXX	VARIABLE	PART,REMOVE FROM MOUNTING LOCATION OR MATING PART	
U	MAO	MDAPRO7	156	PART,REMOVE FROM MOUNTING LOCATION OR MATING PART,TIGHT FITTING PARTS	
U	MAA	MDAPRO8	95	PART,REMOVE FROM MATING PART BY PUSHING WITH THUMBS	16
U	MAA	MDAPRO9	107	PART,REMOVE FROM MATING PART WITH FINGER	
U	MAA	TOAPIXX	TABLE	PART,INSTALL INTO HOLE OR ONTO SHAFT	
U	MAF	BDPBOO1	42	BRUSH,DIP	
U	MAA	BDPCWO1	38	CLOTH,WRING TO REMOVE EXCESS FLUID	
U	MAA	BDPHIO1	40	HAND,IMMERSE IN FLUID,REMOVE,AND SHAKE TO REMOVE EXCESS	
U	MAO	BDPODO1	63	OBJECT,DIP IN VISCOUS MATERIAL SUCH AS GREASE, RED LEAD OR SIMILAR	17
U	MAA	BDPPIXX	VARIABLE	PART,IMMERSE AND SHAKE	
U	MAA	TDPOIXX	TABLE	OBJECT,IMMERSE IN LIQUID OR PASTE	
U	MAA	BELAPXX	VARIABLE	APPLY PRESSURE	
U	MAA	BELDEXX	VARIABLE	DISENGAGE ONE OBJECT FROM ANOTHER OBJECT	
U	MAA	BELEDO1	7	EXTENDED DISTANCE	18
U	MAA	BELEFO1	7	EYE,FOCUS ON OBJECT	
U	MAA	BELETXX	VARIABLE	EYE,TRAVEL	
U	MAA	BELRGO1	6	REGRASP	
U	MAL	BELTOO1	27	TIME,OBSERVE	
U	MAA	BELTSXX	VARIABLE	TURN WRIST,SHIFT GRASP AND TURN,WITH OR WITHOUT PRESSURE	
U	MAA	BELTWXX	VARIABLE	TURN WRIST,TURN ONLY,WITH OR WITHOUT PRESSURE	
U	MAA	TELWFXX	TABLE	WEIGHT FACTOR,FIRST AND ADDITIONAL	17
U	FAL	BEVVTXX	VARIABLE	VEHICLE,TRAVEL	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAL	MFVSF01	177	SEATBELT,FASTEN AND UNFASTEN	19
U	MAL	MEVTM01	521	TRUCK,MOUNT AND DISMOUNT	
U	MOL	MFVTS01	395	TRUCK,START AND STOP	
U	MAF	BGMAC01	103	ALIGNMENT,CHECK WITH STRAIGHTEDGE	
U	MAF	BGMAC02	120	ALIGNMENT,CHECK WITH LEVEL	
U	MAA	BGMRR01	22	RULE,READ TO COMPARE MARK ALIGNMENT	20
U	MAF	BGMSA01	44	SQUARE,ALIGN TO MARK	
U	MAF	BGMSU01	139	SQUARE,USE(PART IN HAND)	
U	MAF	BGMSU02	218	SQUARE,USE(PART ON BENCH)	
U	MAL	MGMMMXX	VARIABLE	MATERIAL,MEASURE LENGTH OF	
U	MAW	MGMRUXX	VARIABLE	RULE(SIX-FOOT FOLDING),USE	
U	MAF	MGMSUXX	VARIABLE	SCALE,USE	
U	MAA	TGTOGXX	TABLE	OBJECT,GET AND PLACE	21
U	MAA	TGTOOXX	TABLE	OBJECT,OBTAIN	
U	MAO	BIDSS01	65	STAMP(METAL),STRIKE WITH HAMMER	22
U	MAO	MIOAIXX	VARIABLE	INK(OR PAINT),APPLY TO STENCIL WITH DAUBER	
U	MAA	MIDASXX	VARIABLE	STAMP(RUBBER),APPLY	
U	MAA	MIDDC01	126	DATE,CHANGE,ADJUSTABLE RUBBER DATE STAMP	
U	MAA	MIDDI01	346	DECAL(NON-PRESSURE SENSITIVE),INSTALL	
U	MAA	MIDDR01	368	DECAL,REMOVE WITH TOOL	
U	MAO	MIDIAXX	VARIABLE	INK(OR PAINT),APPLY TO STENCIL W/ROLLER	23
U	MAA	MIDPA01	609	PAINT,APPLY TO IDENTIFICATION PLATE	
U	MAO	MIDSA01	94	STENCIL,APPLY WITH BLOCK STAMP	
U	MAO	MIDSP01	68	STENCIL,POSITION TO SURFACE	
U	MAO	MIDSS01	2800	STAMP(GANG),SET UP(10 MARKERS)	
U	MAL	MIDTA01	239	TAG,ATTACH TO OBJECT,WITH STRING(TIED)	
U	MAA	MIDTA02	185	TAG,ATTACH TO OBJECT WITH STRING(TAG PULLED THROUGH LOOP)	
U	MAA	MIDTA03	249	TAG,ATTACH TO OBJECT BY FORMING SLIP LOOP IN STRING	
U	MAA	MIDTA04	436	TAG,ATTACH STRING	24
U	MAL	MIDTA05	271	TAG(OR ENVELOPE),ATTACH TO OBJECT WITH WIRE (TWISTED)	
U	MAA	MIDTA06	317	TAG,ATTACH TO OBJECT WITH WIRE(LOOPED AND TWISTED)	
U	MAA	MIDTA07	356	TAG,ATTACH WIRE	
U	MAA	MIDTRXX	VARIABLE	TAG,REMOVE FROM OBJECT	
U	MAA	SIDDI01	468	DECAL(PRESSURE SENSITIVE),INSTALL,TO 1.5 X 2.5 INCHES	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	SIDSA01	1416	STENCIL,APPLY,PAINT,AND REMOVE	24
U	MAA	SIDTA01	640	TAPE,ATTACH TO PART AND WRITE IDENTIFICATION ON TAPE	25
U	MAA	BITBI01	20	GAUGE(BURR INDICATOR),USE	
U	MAO	BITCA01	79	CALIPER(VERNIER),ADJUST SLIDING HEAD,FOUR INCHES	
U	MAF	BITCOXX	VARIABLE	CALIPER,OPEN OR CLOSE	
U	MAF	BITCSXX	VARIABLE	CALIPER,SET WITH SCALE	
U	MAF	BITCUXX	VARIABLE	CALIPER,USE	
U	MAA	BITCU07	92	CALIPER(VERNIER),USE TO MAKE ADDITIONAL CHECK ON INSIDE OR OUTSIDE DIMENSION	26
U	MAA	BITCU08	211	CALIPER,USE,CHECK OUTSIDE DIAMETER WITH PRE-SET SPRING CALIPER	
U	MAA	BITDI01	26	INDICATOR(DIAL),USE TO CHECK POSITION OR SPOT	
U	MAA	BITETXX	VARIABLE	EYE TIMES,SHIFT FROM POINT TO POINT	
U	MAA	BITFE01	28	GAUGE(FEELER),USE TO CHECK CLEARANCE,PER SPOT, POSITION,OR FIRST INCH	
U	MAA	BITFE02	9	GAUGE(FEELER),USE TO CHECK CLEARANCE, ADDITIONAL INCH	
U	MAA	BITFE03	89	GAUGE(FEELER),SELECT FIRST LEAF FROM FAN TYPE FEELER IN METAL CASE	
U	MAA	BITFE04	38	GAUGE(FEELER),SELECT ADDITIONAL LEAF FROM FAN TYPE FEELER,LEAVES PREVIOUSLY MOVED OUT OF CASE	27
U	MAA	BITFP01	8	GAUGE(FLUSH PIN),USE	
U	MAA	BITGO01	20	GAUGE(GRINDER),USE-CHECK OUTSIDE DIAMETER	
U	MAA	BITGS01	166	GAUGE(PASSAMETER),SET GAUGE WITH GAUGE BLOCK	
U	MAF	BITGU01	428	GAUGE(RING GAUGE), USE	
U	MAW	BITIR01	44	INDICATOR(DIAL),READ	
U	MAA	BITIS01	49	INDICATOR(DIAL),SET TO ZERO	
U	MAA	BITIU01	14	INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE,FIRST INCH	
U	MAA	BITIU02	10	INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE	
U	MAA	BITMR01	95	INDICATOR(DIAL),USE TO CHECK MANDREL RUNOUT PER DIAMETER	
U	MAF	BITMUXX	VARIABLE	MICROMETER,USE,READ SCALE	28
U	MAA	BITMU03	140	MICROMETER,USE,CHANGE POSITION OF THIMBLE FOR MAKING CHECK OF SIZE DIFFERENT FROM PRIOR CHECK	
U	MAA	BITMU04	22	MICROMETER,USE TO CHECK PART AFTER CHANGE SETTING,BIT-MU-03	
U	MAA	BITMU05	74	MICROMETER,USE,TO CHECK PART(CHANGE SETTING,BIT-MU-03,NOT NECESSARY)	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	BITPG01	31	GAUGE(PLUG),CHECK HOLE FOR SIZE ONLY WITH GO END	28
U	MAA	BITPG02	27	GAUGE(PLUG),CHECK HOLE FOR SIZE ONLY WITH NO GO END	
U	MAA	BITPG03	34	GAUGE(PLUG),CHECK FOR SIZE AND DEPTH	
U	MAA	BITREXX	VARIABLE	ROD,EXAMINE VISUALLY WITH NAKED EYE	29
U	MAA	BITSN01	26	GAUGE(SNAP),USE TO CHECK DIAMETER OF PART	
U	MAA	BITWEXX	VARIABLE	WIRE,EXAMINE VISUALLY,SAFETY,TWISTED	
U	MAA	MITBC01	561	BATTERY,CHECK WATER LEVEL,12 VOLT WATER TYPE BATTERY WITH SIX CELLS	
U	TUA	MITCA01	165	CONTROL,ADJUST AND OBTAIN DIAL READING	
U	MAA	MITCA02	79	CONTROL,ADJUST KNOB/DIAL AND READ	
U	MAA	MITCA03	209	CONTROL,ADJUST WITH SCREWDRIVER,READ OSCILLOSCOPE	30
U	MAA	MITCA04	161	CONTROL,ADJUST,ZERO METER WITH TOOL	
U	MAA	MITGUXX	VARIABLE	GAUGE(TELESCOPE AND OUTSIDE MICROMETER),USE	
U	MAF	MITGU03	1100	GAUGE(HEIGHT GAUGE),USE	
U	MAF	MITGU04	889	GAUGE(DEPTH VERNIER),USE	
U	MAA	MITGU05	126	GAUGE(PLUG GAUGE,GO/NO GO),USE	
U	MAA	MITGU06	205	GAUGE(FEELER),USE,GAUGE CLEARANCE OR END PLAY	
U	MAO	MITIA01	182	INDICATOR,ADJUST TO WORK,MAGNETIC BASE INDICATOR	31
U	MAF	MITIS01	62	INDICATOR(DIAL),SET	
U	MAA	MITHMXX	VARIABLE	MICROMETER,MEASURE DEPTH	
U	MAF	MITMUXX	VARIABLE	MICROMETER,USE	
U	MAA	MITMU04	427	MICROMETER,USE—CHECK OBJECTS OF DIFFERENT SIZE	
U	MAA	MITMU05	380	MICROMETER,USE—CHECK OBJECTS OF SAME SIZE	
U	MAF	MITMU06	343	MICROMETER,USE(REMOVE AND REPLACE EXTENSION ON INSIDE MICROMETER)	
U	MAA	MITMU07	265	MICROMETER,USE,CHECK INSIDE DIAMETER OR BETWEEN TWO SURFACES	32
U	MAW	MITWM01	185	WIRE,MEASURE FOR GAGE	
U	MAA	TITETXX	TABLE	EYE,TRAVEL FROM POINT TO POINT TO INSPECT	
U	MAA	TITGUXX	TABLE	GAUGE(FEELER WITH LOCKNUT),USE	
U	MAA	TITHMXX	TABLE	MICROMETER(OUTSIDE),MEASURE DIMENSION AND READ	33
U	MAA	TITOEXX	TABLE	OBJECT,EXAMINE SURFACE CONDITION VISUALLY WITH NAKED EYE	
U	MAA	TITUGXX	TABLE	GAUGE(PLUG),USE	34
U	MAA	SITAIXX	VARIABLE	AREA,INSPECT WITH LIGHT	
U	MAA	SITMUXX	VARIABLE	MICROMETER(DEPTH),USE WITH PARALLEL BARS	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MJPAPXX	VARIABLE	APRON,PUT ON AND REMOVE	34
U	MAW	MJPBI01	170	BAR(LOCKING),INSTALL AND REMOVE,TOOL CABINET OR SIMILAR	
U	MAF	MJPCCXX	VARIABLE	CORD(ELECTRIC),CONNECT AND DISCONNECT	35
U	MAA	MJPCI01	127	COMPONENT(BAYONET TYPE),INSTALL	
U	MAF	MJPCO01	73	COMPARTMENT(TOOL),OPEN OR CLOSE MOUNTED ON TRUCK OR SIMILAR	
U	MAL	MJPCO02	102	COMPARTMENT(DASH),OPEN AND CLOSE	
U	MAA	MJPCP01	1145	COVERALLS,PUT ON AND REMOVE	
U	MAA	MJPCR01	69	COMPONENT(BAYONET TYPE),REMOVE	
U	MAF	MJPCU01	1186	CORD(ELECTRIC EXTENSION),UNCOIL,CONNECT, DISCONNECT AND COIL	
U	MAA	MJPDCXX	VARIABLE	DOOR(CABINET),CLOSE AND OPEN,SWING OR SLIDE	36
U	MAF	MJPDC05	276	DOOR(CABINET),CLOSE AND OPEN,UNLOCK AND LOCK	
U	MAA	MJPDC06	128	DOOR(CABINET),CLOSE AND OPEN,SINGLE OR DOUBLE WITH LOCKING HANDLE OR KNOB	
U	MAO	MJPDC07	349	DOOR(CABINET),CLOSE AND OPEN,SECURED WITH PIN LATCH	
U	MAA	MJPDOXX	VARIABLE	DRAWER(STORAGE),OPEN AND CLOSE	
U	MAA	MJPDO09	30	DRAWER(TOOL BOX),OPEN AND CLOSE	37
U	MAA	MJPEP01	131	EARMUFFS,PUT ON AND REMOVE	
U	MAA	MJPGGXX	VARIABLE	GLASSES,GOGGLES,OR SHIELD,PUT ON AND REMOVE	
U	MAA	MJPGG04	477	GLASSES,REMOVE FROM CASE,PUT ON,REMOVE,AND RETURN TO CASE	
U	MAA	MJPGM01	152	GLASS(ILLUMINATED MAGNIFYING),MOVE INTO POSITION AND MOVE ASIDE	
U	MAA	MJPGPXX	VARIABLE	GLOVES,PUT ON AND REMOVE	
U	MAA	MJPGR01	230	GUN(SPRAY),REPLACE	
U	MAW	MJPHCXX	VARIABLE	HOSE(AIR),CONNECT OR DISCONNECT	38
U	MAA	MJPHPXX	VARIABLE	HAT,PUT ON AND REMOVE	
U	MAW	MJPHW01	557	HOSE(AIR),WIND FOR STORAGE,25 FEET LONG	
U	OBW	MJPIA01	224	INDICATOR(DIAL),ASSEMBLE TO MAGNETIC BASE	
U	OBW	MJPIA02	373	INDICATOR(DIAL),ASSEMBLE TO HEIGHT GAUGE	
U	OBW	MJPID01	179	INDICATOR(DIAL),DISASSEMBLE FROM MAGNETIC BASE	
U	OBW	MJPID02	282	INDICATOR(DIAL),DISASSEMBLE FROM HEIGHT GAUGE	
U	MAA	MJPJP01	324	JACKET,PUT ON AND REMOVE	
U	MAF	MJPLM01	211	LADDER,MOVE TO NEW LOCATION	39
U	MAA	MJPMP01	204	MASK(FACE),PUT ON AND REMOVE,AIR FILTERING, DISPOSABLE TYPE MASK	
U	MAA	MJPPCXX	VARIABLE	PAPER(STENCIL),CUT ON PAPER CUTTER	

OCCUP-ATION	QUALITY	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MJPPI01	112	PLUG,INSERT IN AND REMOVE FROM RECEPTACLE	39
U	MAA	MJPPP01	685	PLUG,PUT IN AND REMOVE FROM EAR	
U	MAF	MJPRG01	137	RAG,GET FROM COVERED CAN	
U	MAL	MJPSA01	219	STENCIL,AFFIX ON ROLL STAMP,TEST AND REMOVE	
U	MAF	MJPS001	772	STEPLADDER,OBTAIN FROM FLOOR,SET UP,TAKE DOWN, AND ASIDE TO FLOOR,LADDER TO 12 FEET TALL	40
U	MAA	MJPSP01	879	SMOCK(TIE TYPE),PUT ON AND REMOVE	
U	MAA	MJPTGXX	VARIABLE	TOOL,GET FROM AND RETURN TO TOOL DRAWER	
U	MAA	MJPTOXX	VARIABLE	TOOLBOX(MACHINIST),OPEN AND CLOSE	
U	MAA	MJPT003	195	TOOLBOX,OPEN AND CLOSE,STORAGE TYPE 2.5X5X1.5 FEET	
U	MAA	MJPT004	70	TOOLBOX,OPEN AND CLOSE LID	
U	MAW	MJPTU01	158	TOOLBOX,UNLOCK,OPEN,CLOSE,AND LOCK	41
U	MAO	MJPWA01	167	WIRE,ATTACH TO HOOK,SINGLE STRAND WIRE	
U	MAO	MJPWA02	110	WIRE,ATTACH TO PART	
U	MAO	MJPWA03	83	WIRE,ATTACH TO LARGE PART	
U	TBA	SJPCAXX	VARIABLE	CREAM(HAND),APPLY	
U	MAA	SJPCR01	261	CABLE,REMOVE FROM AND RETURN TO CASE,CABLE ROLLED AND STOWED IN CASE	
U	MAA	SJPCR02	1218	CABLE,REMOVE FROM AND RETURN TO CASE,CABLE WOUND ON RACK IN LID	42
U	MAA	SJPGF01	2032	GUN(HAND OPERATED GREASE),FILL	
U	NUA	SJPGP01	3452	GUN(PAINT SPRAY),PREPARE FOR USE	
U	MAA	SJPK001	136	KNIFE(POCKET),OPEN AND CLOSE	
U	MAA	SJPMS01	1659	MICROMETER(INSIDE),SET UP WITH TWO EXTENSIONS	43
U	MAA	SJPPMXX	VARIABLE	PLATE,MASK EDGES WITH TAPE PRIOR TO PAINTING	
U	MAA	SJPSC01	994	STRAIGHTEDGE,CLAMP TO PART WITH THREE C-CLAMPS	
U	MAA	SJPTAXX	VARIABLE	TORCH(PORTABLE PROPANE),ASSEMBLE/DISASSEMBLE	
U	MAF	BLOLD01	43	LINE,DRAW USING SQUARE	
U	MAF	BLOLSXX	VARIABLE	LINE,SCRIBE,TO SCALE OR STRAIGHTEDGE	
U	MAF	BLOPM01	50	POINT,MARK	44
U	MAF	BLOSA01	189	STRAIGHTEDGE,ALIGN,TO POINTS OR LINE	
U	MAA	MLOLSXX	VARIABLE	LINE,SCRIBE TO SCALE(STRAIGHTEDGE)	
U	MAA	MLOLS13	125	LINE,SCRIBE,EXACT POSITION,METAL SURFACE	45
U	MAF	MLOPM01	188	POINT,MARK WITH PENCIL	
U	MAA	SLODMXX	TABLE	DIMENSION,MEASURE AND MARK	
U	MAA	BLUBLXX	VARIABLE	SURFACE(LINEAR),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK	
U	MAA	BLUBSXX	VARIABLE	SURFACE(SPOT),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK	46

OCCUP-ATION	QUALITY	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAW	BLUDLO1	56	DIE(OR TAP),LUBRICATE WITH OIL FROM LEVER OR DIAPHRAGM TYPE CAN	46
U	MAA	BLUGBO1	34	LUBRICANT,APPLY TO FITTING WITH BUTTON TYPE GUN	
U	MAA	BLUGLO1	36	LUBRICANT,APPLY TO FITTING WITH HAND OPERATED LEVER TYPE GUN(PER STROKE)	
U	MAA	BLUOLO1	28	LUBRICANT,APPLY WITH OIL CAN(PER LINEAR FOOT)	
U	MAA	BLUOSO1	18	OIL,APPLY TO SPOT WITH TRIGGER TYPE OIL CAN	
U	MAA	BLUOSO2	15	OIL,APPLY TO SPOT WITH DIAPHRAGM TYPE OIL CAN	
U	MAA	BLUTAO1	26	LUBRICANT,APPLY WITH TUBE TO AREA,1 INCH X 1 INCH	
U	MAA	BLUTSO1	20	LUBRICANT,APPLY WITH TUBE TO SPOT,1/4X1/4 INCH	47
U	MAA	SLUALXX	VARIABLE	LUBRICANT,APPLY TO SMALL OBJECT	
U	MAA	SLULAXX	TABLE	LUBRICANT,APPLY TO ZERK FITTING WITH HAND OPERATED GUN	
U	MAA	BMHDSO1	30	OBJECT,START MOVING BY PUSHING(WHEELED OBJECT)	
U	MAL	BMHWPO1	160	WHEELBARROW,PICK UP HANDLES AND PUT DOWN	
U	MAA	MMHOSO1	42	OBJECT,START MOVEMENT BY PUSHING	
U	MAA	BNFBTO1	197	BOW,TIE IN STRING ON OBJECT	49
U	MAA	BNFBUO1	40	BOW,UNTIE	
U	MAA	BNFKTO1	215	KNOT,TIE,SQUARE,USING TWO ENDS OF STRING	
U	MAA	BNFKTO2	101	KNOT,TIE,HALF HITCH,USING SINGLE END OF LINE	
U	MAA	BNFKTO3	95	KNOT,TIE,(STRING),SLIP HALF HITCH,USING SINGLE END OF LINE	
U	MAA	BNFKTO4	70	KNOT,TIE,CLOVE HITCH,USING SINGLE END OF LINE	
U	MAA	BNFKTO5	83	KNOT,TIE(STRING),BOWLINE,USING SINGLE END OF LINE	
U	MAA	BNFKTO6	78	KNOT,TIE(ROPE),HALF HITCH	
U	MAF	BNFKTO7	147	KNOT,TIE(ROPE),CLOVE HITCH	
U	MAF	BNFKTO8	100	KNOT,TIE(ROPE),BOWLINE	49
U	MAA	BNFKTO9	267	KNOT,TIE(ROPE),BARREL HITCH,TIMBER HITCH,OR STOPPER	
U	MAA	BNFKT10	164	KNOT,TIE(ROPE),SQUARE	
U	MAA	MNFEMXX	VARIABLE	EDGE,MASK WITH PAPER TAPE	
U	MAW	MNFFOXX	VARIABLE	FASTENER,OPEN AND CLOSE ON CASE	
U	MAA	MNFIPO1	93	PLUG(OR CAP),INSTALL,NON-THREADED PLASTIC	
U	MAA	MNFISXX	VARIABLE	WIRE(SAFETY),INSTALL USING SAFETY WIRE TWISTING PLIERS	50
U	MAA	MNFKIO1	311	KEY,INSTALL,WOODRUFF WITH HAMMER AND DRIFT PUNCH	
U	MAA	MNFKIO2	87	KEY,INSTALL,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS NEEDED	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MNFKI03	293	KEY,INSTALL,STRAIGHT MACHINE,TIGHT FIT,USE OF HAMMER AND DRIFT PUNCH REQUIRED	50
U	MAA	MNFKR01	370	KEY,REMOVE,WOODRUFF,WITH HAMMER AND DRIFT PUNCH	
U	MAA	MNFKR02	38	KEY,REMOVE,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS REQUIRED	
U	MAA	MNFKR03	258	KEY,REMOVE,STRAIGHT MACHINE,HAMMER AND DRIFT PUNCH REQUIRED	
U	MAA	MNFKR04	286	KEY,REMOVE,TAPERED MACHINE,HAMMER AND PUNCH REQUIRED	
U	MAA	MNFLCXX	VARIABLE	LOCK(LATCH),CLOSE AND LOCK	51
U	MAA	MNFLOXX	VARIABLE	LOCK(LATCH),OPEN AND MOVE ASIDE	
U	MAO	MNFLT01	48	LATCH,TURN TO CLOSE BOX OR CONTAINER	
U	MAO	MNFLT02	47	LATCH,TURN TO OPEN BOX OR CONTAINER	
U	MAF	MNFPA01	173	PASTE,APPLY WITH BRUSH	
U	MAA	MNFPIXX	VARIABLE	PIN,INSTALL,VARIOUS TYPES	52
U	MAA	MNFPP01	40	PIN,PREPARE TO PRESS(REMOVAL)	
U	MAA	MNFPP02	107	PIN,PREPARE TO PRESS(INSTALLATION)	
U	MAA	MNFPRXX	VARIABLE	PIN,REMOVE,VARIOUS TYPES	53
U	MAA	MNFRI01	271	RING(SNAP),INSTALL,INTERNAL OR EXTERNAL,UP TO ONE INCH FROM END OF PART USING SPECIAL SNAP RING PLIERS	
U	MAA	MNFRPXX	VARIABLE	PLUG(OR CAP),REMOVE,NON-THREADED PLASTIC, USING A SCREWDRIVER	
U	MAA	MNFRR01	136	RETAINER,REMOVE,SNAP RING,INTERNAL OR EXTERNAL USING SNAP RING PLIERS	
U	MAA	MNFRR02	865	RETAINER,REMOVE,RING,SPRING,LOCKWIRE OR FLAT STEEL,USING TOOLS	
U	MAA	MNFRR03	146	RETAINER,REMOVE,SNAP ON CLIP TYPE,USING PLIERS	
U	MAA	MNFRTXX	VARIABLE	RETAINER(TRU-ARC),INSTALL OR REMOVE	54
U	MAL	MNFSI01	51	STAPLE,INSTALL WITH PLIER GRIP STAPLER	
U	MAA	MNFSR01	86	STAPLE,REMOVE,3/8 OR 1/2 INCH,USING PLIER TYPE STAPLE REMOVER	
U	MAA	MNFTAXX	VARIABLE	TAPE(ADHESIVE),ATTACH TO DESIRED POSITION	
U	MAA	MNFTFXX	VARIABLE	TURNLOCK,FASTEN OR UNFASTEN(DZUS,CAMLOCK,ETC.)	
U	MAO	MNFTG01	65	TAPE,GET FROM DISPENSER,6 INCH LENGTH OF TAPE	
U	MAA	MNFTR01	167	TAPE,REMOVE FROM ROLL	55
U	MAA	MNFTR02	97	TAPE,REMOVE FROM OBJECT	
U	MAA	MNFTR03	191	TAPE(MASKING),REMOVE	
U	MAA	MNFTTXX	VARIABLE	TAPE,TEAR FROM LOOSE ROLL DISPENSER	
U	MAA	MNFWC01	94	WIRE(SAFETY),CUT OFF EXCESS AND BEND END OVER, TWISTED SINGLE STRAND TO .0625 INCH DIAMETER	

DEFENSE WORK MEASUREMENT STANDARD TIME DATA
ELEMENT INDEX

OCCUP-ATION	QUALITY	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MNFWIXX	VARIABLE	WIRE(SAFETY),INSERT THROUGH HOLE	55
U	MAA	MNFWOXX	VARIABLE	WIRE,OBTAIN FROM ROLL AND STRAIGHTEN END	56
U	MAA	MNFWR01	184	WIRE(SAFETY),REMOVE FROM FIRST STATION,SINGLE STRAND	
U	MAA	MNFWR02	270	WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED, FIRST STATION	
U	MAA	MNFWR03	225	WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED ADDITIONAL STATION UP TO 6 INCHES APART	
U	MAA	MNFWSXX	VARIABLE	WIRE(SAFETY),SECURE TO ANCHOR STATION WITH ONE TWIST BY HAND	
U	MAA	MNFWTXX	VARIABLE	WIRE(SAFETY),TWIST BETWEEN ANCHORS WITH SAFETY WIRE PLIERS,WIRE TO .0625 INCH DIAMETER	57
U	MAL	TNFNSXX	TABLE	NAIL,SET AND DRIVE	
U	MAA	TNFPAXX	TABLE	PRESS(ARBOR),ACTUATE TO INSTALL OR REMOVE PIN OR CYLINDRICAL PART	58
U	MAA	TNFWIXX	TABLE	WIRE(SAFETY),INSTALL,TWO-STRAND TWISTED BETWEEN UNOBSTRUCTED ANCHORS,WIRE TO .0625 INCH DIAMETER	60
U	MAA	SNFTCXX	VARIABLE	TAPE(PLASTIC),CUT PIECE FROM ROLL	61
U	MAA	SNFWIXX	VARIABLE	WIRE(SAFETY-CONTINUOUS),INSTALL	
U	MAA	SNFWRXX	VARIABLE	WIRE(SAFETY-CONTINUOUS),REMOVE	
U	TAA	TOGNMXX	TABLE	NUMBERS,MULTIPLY(READ,TRANSPOSE)	
U	MAA	SOGDU01	492	DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK	62
U	MAA	SOGDU02	719	DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK	
U	MAA	BOHCD01	35	CONTAINER,DUMP PARTS	
U	MAO	BOHHP01	56	HOOK,PLACE IN PART,S-TYPE HOOK	
U	MAA	BOHOG01	38	OBJECT,GAIN CONTROL AFTER GET HANDFUL OF OBJECTS	
U	MAO	BOHPHXX	VARIABLE	PART,HANG WITH "S" HOOK	
U	MAA	BOHPSXX	VARIABLE	PARTS, SEPARATE BY PULLING	63
U	MAA	MOHBO01	97	BOOK,OPEN TO MARKED PAGE	
U	MAA	MOHBR01	203	BOOK,REMOVE FROM AND REPLACE IN OPEN BOOKCASE	
U	MAO	MOHCD01	129	CONTAINER,DUMP PARTS	
U	MAL	MOHCOXX	VARIABLE	CLIPBOARD,OBTAIN,AFFIX,OR REMOVE DOCUMENT AND ASIDE	
U	MAA	MOHDO01	108	DOOR(PASSAGE),OPEN AND CLOSE WITH DOORKNOBS PUSH OR PULL REQUIRED TO OPEN DOOR	
U	MAA	MOHDO02	68	DOOR(PASSAGE),OPEN AND CLOSE,WITH DOORKNOBS AND CLOSER MECHANISM,PUSH REQUIRED TO OPEN DOOR	
U	MAA	MOHDO03	90	DOOR(PASSAGE),OPEN AND CLOSE,WITH DOORKNOB, PULL TO OPEN,WITH AUTOMATIC CLOSER	64

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OCCUP-ATION	QUALITY	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MOHDO04	75	DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PUSH TO OPEN,WITH AUTOMATIC DOOR CLOSER	64
U	MAA	MOHDO05	114	DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PULL TO OPEN,WITH AUTOMATIC DOOR CLOSER	
U	MAA	MOHDO06	91	DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE PUSH TO OPEN,WITH AUTOMATIC CLOSER	
U	MAA	MOHDO07	127	DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE, PULL TO OPEN,WITH AUTOMATIC CLOSER	
U	MAA	MOHDO08	75	DOOR(PASSAGE),OPEN AND CLOSE,TWO-WAY SWINGING	
U	MAA	MOHDO09	111	DOOR(PASSAGE),OPEN,SLIDING	
U	MAA	MOHDO10	138	DOOR(PASSAGE),CLOSE,SLIDING	
	MAL	MOHDRO1	463	DOOR(OVERHEAD),RAISE AND LOWER,MANUALLY	65
U	MAF	MOHDUO1	143	DOOR(OFFICE),UNLOCK	
U	MAA	MOHFIO1	135	FUSE,INSTALL IN FUSE HOLDER/BLOCK	
U	MAA	MOHFRO1	83	FUSE,REMOVE FROM HOLDER/BLOCK	
U	MAA	MOHGOXX	VARIABLE	GATE(CONVEYOR),OPEN OR CLOSE,SINGLE GATE OR ONE SIDE OF DOUBLE GATE	
U	MAL	MOHHAO1	197	HOOK,ATTACH AND DETACH TO/FROM ITEM	
U	MAO	MOHHRO1	42	HOOK("S"),REMOVE FROM PART	
U	MAA	MOHLRXX	VARIABLE	LID,REMOVE AND REPLACE,TRASH CAN OR SIMILAR TO 24 INCHES DIAMETER	
U	MAA	MOHOGO1	65	OBJECT,PENCIL,GET FROM SHIRT POCKET	66
U	MAA	MOHOPO1	73	OBJECT,PLACE IN SHIRT POCKET,SUCH AS PENCIL, SCRIBE,OR SCALE	
U	MAF	MOHOSO1	590	OBJECT(HEAVY),SLIDE ON FLOOR	
U	MAL	MOHPUXX	VARIABLE	OBJECT,PICK UP AND SET DOWN	
U	MAF	MOHPPO1	180	PART,PICK UP AND SET DOWN	
U	MAO	MOHWPO1	41	WIRE,PLACE THROUGH HOLE IN OBJECT	
U	MAA	TOHORXX	TABLE	OBJECT,REPOSITION AT WORKPLACE BY SLIDING OR LIFTING AND TURNING,OBJECT TO 50 POUNDS WEIGHT,TURN TO 180 DEGREES	67
U	MAA	TOHOTXX	TABLE	OBJECT,TURN ABOUT HORIZONTAL OR VERTICAL AXIS TO 180 DEGREES,OBJECT ATTACHED TO STAND OR FIXTURE,EFFECTIVE NET RESISTANCE(ENR) TO 50 POUNDS	
U	MAA	SOHBOXX	VARIABLE	BOOK,OBTAIN FROM OPEN SHELF AND RETURN	68
U	MAA	SOHOHXX	VARIABLE	OBJECT,HANG ON HOOK	
U	MAL	SOHPMXX	VARIABLE	PLYWOOD,MANHANDLE	
U	MAA	SOHPRO1	123	PART,REMOVE WITH PRY TOOL	
U	MAO	BPAPAO1	63	PAINT(GREASE OR VARNISH),APPLY WITH BRUSH	
U	MAA	HPAPSXX	VARIABLE	PAINT,SPRAY	69
U	MAA	MPAPSXX	VARIABLE	PAINT,SPRAY	

OCCUP-ATION	QUALITY	OWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	SPAAPXX	VARIABLE	PAINT, APPLY WITH BRUSH ATTACHED TO BOTTLE CAP	69
U	MAA	SPAPAXX	VARIABLE	PAINT, APPLY WITH BRUSH	
U	MAA	MPHDA01	212	DOCUMENT, ATTACH TO ITEM WITH RUBBER BAND	
U	MAA	MPHDD01	139	DOCUMENT, DETACH FROM ITEM AND UNROLL, DOCUMENT SECURED WITH RUBBER BAND	
U	MAA	MPHDR01	275	DOCUMENT, REMOVE FROM BAG, UNFOLD, FOLD, AND REPLACE IN BAG	70
U	MAA	MPHDR02	128	DOCUMENT, REMOVE FROM AND RETURN TO PLASTIC BAG	
U	MAA	BPKB001	25	BAG(PAPER), OPEN, PREPARATORY TO PLACE OBJECT IN BAG	
U	MAA	BPKCCXX	VARIABLE	CONTAINER(PLASTIC), CLOSE, SNAP-ON LID	
U	MAA	BPKCOXX	VARIABLE	CAN, OPEN WITH STATIONARY CRANK TYPE CAN OPENER	
U	MAA	BPKCR01	39	COVER, REMOVE FROM PLASTIC CONTAINER, SNAP ON COVER, 1-7 INCHES DIAMETER	
U	MAA	BPKEOXX	VARIABLE	ENVELOPE, OPEN BY TEARING END	71
U	MAA	BPKJC01	62	JAR, CLOSE, SCREW TYPE LID	
U	MAA	BPKJO01	66	JAR, OPEN, SCREW TYPE LID	
U	MAA	BPKTCXX	VARIABLE	TAPE, CUT WITH KNIFE TO OPEN PACKAGE, BOX, ETC.	
U	MAA	MPKBOXX	VARIABLE	BOX, OPEN	
U	MAA	MPKBTXX	VARIABLE	BAG(PAPER), TEAR TO OPEN	72
U	MAA	MPKCCXX	VARIABLE	CAN(HERMETICALLY SEALED), CLOSE OR OPEN	
U	MAA	MPKCOXX	VARIABLE	CAN(METAL), OPEN WITH STATIONARY CRANK TYPE CAN OPENER, EMPTY CONTENTS, AND ASIDE CAN	
U	MAA	MPKCSXX	VARIABLE	CAN, SCREW CAP ON AND OFF	
U	MAO	MPKD001	170	DRUM(STORAGE), OPEN	
U	MAA	MPKEOXX	VARIABLE	ENVELOPE(PARTS), OPEN AND REMOVE CONTENTS	
U	MAA	MPKJC01	109	JAR, CLOSE, LID SCREWED ON HAND TIGHT	73
U	MAA	MPKJO01	113	JAR, OPEN, SCREW TYPE LID	
U	MAA	MPKLC01	306	LID, CLOSE, PRY OPEN TYPE CAN TO 6 INCHES DIAMETER	
U	MAF	MPKLI01	160	LID, INSTALL ON CAN	
U	MAA	MPKLI02	1016	LID, INSTALL AND SEAL ON FIVE-GALLON CONTAINER, 16 PRY TABS	
U	MAA	MPKLP01	382	LID, PRY OFF CAN TO 6-INCH DIAMETER	
U	MAO	MPKLR01	45	LID(BOX), REMOVE	
U	MAA	MPKLR02	744	LID, REMOVE FROM FIVE-GALLON CONTAINER, 16 PRY TABS	
U	MAA	MPKOU01	178	OBJECT, UNWRAP	74
U	MAA	MPKSC01	158	STRING, CUT AND OPEN BAG	
U	MAA	TPKEOXX	TABLE	ENVELOPE, OPEN, EMPTY, AND ASIDE	

DEFENSE WORK MEASUREMENT STANDARD TIME DATA
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OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	TPKTCXX	TABLE	TAPE,CUT TO OPEN BOX,TAPE ON TWO SIDES AND MIDDLE OF BOX TOP	74
U	MAA	SPKCOXX	VARIABLE	CAN,OPEN AND CLOSE,PRY TYPE LID TO SIX INCHES DIAMETER	
U	MAA	TPLOGXX	TABLE	OBJECT,GET,PLACE TO USE,AND PLACE ASIDE	75
U	MAA	TPLOPXX	TABLE	OBJECT,PLACE WITH A COMBINATION OF MOVE AND/OR POSITION MOTIONS USING THE HAND(S) OR FINGERS	
U	TAA	MPTNC01	67	NOZZLE(AEROSOL PAINT SPRAY CAN),CLEAR	76
U	TBA	BRDDRXX	VARIABLE	DIGIT(S)(MIXED NUMBER),READ & RETAIN	
U	MAF	BRDIL01	98	ITEM,LOCATE IN COLUMN STARTS—WITH BOOK OPEN TO DESIRED PAGE AND EYES	
U	TBA	BRDNRXX	VARIABLE	NUMBER,READ,FIRST OR ADDITIONAL,NO EYE TRAVEL	
U	MAA	BRDWI01	7	WORD,READ,INDIVIDUAL WORD,ALPHA NUMERIC,OR NUMBER TO TRANSPOSE	
U	MAA	BRDWS01	5	WORD(SEQUENCE),READ,PER WORD	
U	MAF	MRDPF01	214	PAGE,FIND,IN MANUAL	
U	TBA	TRDDAXX	TABLE	DIGIT(S),ALPHA—NUMERIC,READ & RETAIN EYE TRAVEL TO & FROM NUMBER	77
U	TBA	TRDDNXX	TABLE	DIGIT(S),NUMERIC,READ & RETAIN,EYE TRAVEL TO & FROM NUMBER	
U	TBA	TRDNAXX	TABLE	NUMBER(S),ALPHA—NUMERIC,READ AND VERIFY,EYE TRAVEL FROM DOCUMENT TO DOCUMENT	
U	TBA	TRDNNXX	TABLE	NUMBER(S),NUMERIC,READ & VERIFY,EYE TRAVEL FROM DOCUMENT TO DOCUMENT	78
U	MAL	TRDSSXX	TABLE	SHEET(S),SCAN FOR FAMILIAR REFERENCE POINT(S), LETTER SIZE SHEETS	
U	MAA	MSTCSXX	VARIABLE	COAT,SPRAY(AEROSOL)	79
U	MAA	BTFFMXX	VARIABLE	FASTENER(THREADED),TURN WITH FINGER MOVE ONLY	
U	MAA	BTFFSXX	VARIABLE	FASTENER(THREADED),TURN BY SHIFT GRASP AND MOVE WITH FINGERS	
U	MAL	BTFFTXX	VARIABLE	FASTENER(THREADED),TURN WITH FINGER, PER THREAD	
U	MAA	BTFNP01	32	NUT,POSITION ON STUD	
U	MAD	BTFNP02	57	NUT(SMALL),POSITION AND ENGAGE ON BOLT	
U	MAA	BTFSBXX	VARIABLE	FASTENER(THREADED),START(BLIND)	80
U	MAA	BTFSS01	10	FASTENER(THREADED),SPIN	
U	MAA	BTFSVXX	VARIABLE	FASTENER(THREADED),START(VISIBLE)	
U	MAA	BTFTM01	18	FASTENER(THREADED),TIGHTEN OR LOOSEN	
U	MAA	BTFWA01	24	WASHER,ALIGN TO NUT BEFORE STARTING TO POSITION ON BOLT/SCREW	
U	MAA	BTFWPXX	VARIABLE	WASHER,PLACE ON SCREW OR BOLT	
U	MAA	BTFWRXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST,PER REVOLUTION	

OCCUP-ATION	QUALITY	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	BTFWSXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST,SHIFT GRASP AND TURN	81
U	MAA	BTFWTXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST	
U	MAA	MTFCIXX	VARIABLE	CAP(OR PLUG),INSTALL,PLASTIC THREADED	
U	MAA	MTFCRXX	VARIABLE	CAP(OR PLUG),REMOVE,PLASTIC THREADED	
U	MAA	MTFFGXX	VARIABLE	FASTENER(THREADED),GET(EASY)AND START(VISIBLE)	
U	MAA	MTFFIXX	VARIABLE	FASTENER(THREADED),INSTALL	
U	MAA	MTFFPXX	VARIABLE	FASTENER(THREADED),GET(JUMBLED)AND START (VISIBLE)	82
U	MAA	MTFFSXX	VARIABLE	FASTENER(THREADED),GET(JUMBLED SIMO) AND START (VISIBLE)	
U	MAA	MTFNPXX	VARIABLE	NUT AND WASHER,POSITION ON STUD	
U	MAA	MTFPF01	80	FASTENER(THREADED),POSITION IN HOLE	
U	MAA	MTFWP01	73	WASHER,PLACE ON BOLT OR SCREW	
U	MAA	MTFWP02	62	WASHER,PLACE IN ALIGNMENT WITH NUT PRIOR TO STARTING NUT ON THREADS	
U	MAA	TTFFIXX	TABLE	FASTENER(THREADED),INSTALL WITH HAND	83
U	MAA	TTFFRXX	TABLE	FASTENER(THREADED),REMOVE WITH HAND	
U	MAA	BTLBPXX	VARIABLE	BAR(PRY),USE	
U	MAA	BTLCUXX	VARIABLE	CHISEL(COLD),USE,FIRST OR ADDITIONAL BLOWS	
U	MAA	BTLFU01	37	FILE(OR HACKSAW),USE PER STROKE	
U	MAA	BTLHLXX	VARIABLE	HAMMER(LIGHT),STRIKE ONE BLOW	84
U	MAA	BTLHMXX	VARIABLE	HAMMER(MEDIUM),STRIKE ONE BLOW	
U	MAA	BTLHUXX	VARIABLE	HATCHET,USE,STRIKE FIRST OR ADDITIONAL BLOW	
U	MAA	BTLKUXX	VARIABLE	KNIFE,USE,TO CUT OR SCRAPE,PER STROKE	
U	MAO	BTLMCXX	VARIABLE	MATERIAL,CUT ALONG STRAIGHTEDGE WITH KNIFE	
U	MAA	BTLPA01	72	PLIERS(VISE GRIP)ADJUST	
U	MAW	BTLPA02	75	PLIERS(SLIP JOINT),ADJUST	85
U	MAA	BTLPCXX	VARIABLE	PLIERS(CONVENTIONAL),USE TO CUT,CRIMP,OR GRIP AN OBJECT	
U	MAA	BTLPC03	65	PLIERS(VISE GRIP),CLOSE ON OBJECT AND OPEN TO REMOVE	
U	MAA	BTLSA01	132	SOCKET,ATTACH TO ADAPTER AND ATTACH ADAPTER TO HANDLE	
U	MAA	BTLSCXX	VARIABLE	SCREWDRIVER,CONVENTIONAL,USE	
U	MAA	BTLSD01	62	SOCKET,DISENGAGE FROM ADAPTER AND REMOVE ADAPTER FROM HANDLE	
U	MAA	BTLSRXX	VARIABLE	SCREWDRIVER,RATCHET,USE	86
U	MAA	BTLSSXX	VARIABLE	SCISSORS(OR SHEARS),CUT	
U	MAF	BTLSU01	31	SCREWDRIVER,USE FOR FINAL TIGHTEN OR INITIAL LOOSEN	

OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	BTLTDXX	VARIABLE	TAP(OR DIE),CUT ONE THREAD	86
U	MAA	BTLTUXX	VARIABLE	TOOL,USE(ADDITIVE FOR INSTALLATION OR REMOVAL OF SELF LOCKING FASTENERS)	
U	MAF	BTLWA01	77	WRENCH,ADJUST,MONKEY OR CRESCENT	87
U	MAA	BTLWHXX	VARIABLE	HANDLE("T"),ENGAGE AND DISENGAGE OR USE TO TURN OBJECT	
U	MAA	BTLWLXX	VARIABLE	BOLT(OR NUT),LOOSEN OR TIGHTEN WITH WRENCH	
U	MAO	BTLWP01	39	WRENCH(SPANNER),POSITION TO NUT AND REMOVE AFTER USE	
U	MAA	BTLWR01	26	RATCHET(AND SOCKET),ENGAGE ON AND DISENGAGE FROM PART	
U	MAA	BTLWSXX	VARIABLE	HANDLE(SPEED),ATTACH TO AND REMOVE FROM PART OR TURN HANDLE ONE THREAD	
U	MAA	BTLWTXX	VARIABLE	WRENCH,TORQUE,USE	88
U	MAA	BTLWUXX	VARIABLE	WRENCH(STRAP),USE(ATTACH TO OBJECT)	
U	MAA	BTLWU04	32	WRENCH(STRAP),USE(FINAL TIGHTEN OR INITIAL LOOSEN)	
U	MAA	BTLWU05	75	WRENCH(STRAP),USE,(MAKE ONE QUARTER TURN)	
U	MAA	BTLWU06	39	WRENCH(STRAP),USE,(REMOVE FROM OBJECT)	
U	MAL	MTLBU01	159	BAR(PINCH),USE	
U	MAW	MTLDAXX	VARIABLE	DIE(OR TAP),ASSEMBLE TO OR DISASSEMBLE FROM CHUCK OR HANDLE,HAND-HELD	89
U	MAA	MTLFLXX	VARIABLE	FASTENER(THREADED),LOOSEN WITH HAMMER OR MALLET	
U	MAO	MTLHRXX	VARIABLE	HOLE,REAM BY HAND	
U	MAL	MTLMCXX	VARIABLE	MATERIAL(CLOTH),CUT WITH SCISSORS	90
U	MAF	MTLPS01	97	PUNCH(CENTER),STRIKE	
U	MAA	MTLSC01	121	SOCKET,CHANGE,1/4,3/8,OR 1/2 INCH DRIVE WITH BALL AND SOCKET LOCK	
U	MAL	MTLSEXX	VARIABLE	STENCIL,CUT,ELECTRIC	
U	MAL	MTLSMXX	VARIABLE	STENCIL,CUT,MANUAL	
U	MAF	MTLSO01	99	SNIPS,OPEN ,POSITION TO WORK,CLOSE AND PLACE ASIDE	91
U	MAO	MTLSTXX	VARIABLE	SCREW,TURN IN AND TIGHTEN OR LOOSEN AND TURN OUT WITH SCREWDRIVER	
U	MAF	MTLSU01	155	SHOVEL,USE,TO MOVE LOOSE MATERIAL SUCH AS SAND OR GRAVEL	
U	MAF	MTLSU02	221	SHOVEL,USE	
U	MAW	MTLTC01	690	TUBING,CUT WITH HAND HELD TUBE CUTTER,COPPER OR ALUMINUM TUBING 1/4-1/2 INCH DIAMETER	
U	MAF	MTLTG01	69	TOOL(TWO HANDLES),GET AND ASIDE	
U	MAF	MTLTO01	77	TOOL,OBTAIN FROM OPEN TOOLBOX AND ASIDE TO TOTE BOX OR BENCH TOP	92

OCCUP-ATION	QUALITY	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAF	MTLTRO1	132	TOOL,REMOVE,FROM AND RETURN TO BELT KIT	92
U	MAA	MTLWAO1	397	WRENCH(TORQUE),ADJUST INDICATOR	
U	MAA	MTLWCO1	86	WIRE,CUT WITH DIAGONAL PLIERS	
U	MAO	MTLWPO1	31	WRENCH(HEX NUT DRIVER),POSITION TO NUT,REMOVE	
U	MAA	TTLFIXX	TABLE	FASTENER(THREADED),INSTALL WITH HAND TOOL	93
U	MAA	TTLFRXX	TABLE	FASTENER(THREADED),REMOVE WITH HAND TOOL	95
U	MAA	TTLFTXX	TABLE	FASTENER(THREADED),TIGHTEN OR LOOSEN ONE THREAD,WITH END WRENCH,ALLEN WRENCH OR SIMILAR	97
U	MAL	TTLHUXX	TABLE	HAMMER,USE,STRIKE ONE BLOW	98
U	MAA	TTLPLXX	TABLE	PART,LOOSEN WITH MALLET AND REMOVE	
U	MAA	TTLSPXX	TABLE	SCREWDRIVER(SPIRAL),USE	
U	MAA	TTLWBXX	TABLE	WRENCH,USE,BOX END,OPEN END,ALLEN WRENCH OR SIMILAR	99
U	MAA	TTLWRXX	TABLE	RATCHET,USE TO TURN PART	
U	MAA	STLFIXX	TABLE	FASTENER(THREADED),INSTALL	100
U	MAA	STLFRXX	TABLE	FASTENER(THREADED),REMOVE	102
U	MAA	STLFTXX	VARIABLE	FASTENER(THREADED),TORQUE WITH SNAP TYPE TORQUE WRENCH	103
U	MAA	STLHTXX	VARIABLE	HOLE,TAP	
U	MAA	STLPPXX	VARIABLE	PUMP(PRESSURE),PUMP	104
U	MAO	STLRAO1	572	REAMER,ASSEMBLE,POSITION,DISASSEMBLE	
U	MAA	STLRFXX	VARIABLE	FITTING(ZERK),REMOVE	
U	MAF	BTPWPO1	54	WRENCH(IMPACT),POSITION TO BOLT OR NUT	
U	MAA	BTPWTXX	VARIABLE	WRENCH,TURN PART(POWER WRENCH,FREE RUNNING)	
U	MAL	MTPDPXX	VARIABLE	DRILL,POSITION FOR DRILLING,HAND HELD PORTABLE POWER DRILL	105
U	MAA	MTPFIXX	VARIABLE	FASTENER(THREADED),INSTALL WITH POWER TOOL	
U	MAA	MTPFRXX	VARIABLE	FASTENER(THREADED),REMOVE WITH POWER TOOL	
U	MAA	MTPHCXX	VARIABLE	HOLE,COUNTERSINK OR DEBURR,1/16 INCH DEPTH AND TO 5/8 INCH DIAMETER,ALUMINUM MATERIAL	
U	MAF	MTPTDO1	240	TOOL(ELECTRIC POWER),DISCONNECT AND WIND CORD AROUND TOOL	
U	MAF	MTPTPO1	190	TOOL,PLACE IN CHUCK AND TIGHTEN	
U	MAF	MTPTRO1	120	TOOL,REMOVE FROM CHUCK	106
U	MAF	MTPTUO1	216	TOOL(ELECTRIC POWER),UNWIND CORD AND CONNECT PLUG	
U	MAA	STPFIXX	VARIABLE	FASTENER(THREADED),INSTALL WITH POWER TOOL	
U	MAA	STPFRXX	VARIABLE	FASTENER(THREADED),REMOVE WITH POWER TOOL	
U	MAA	STPTIO1	486	TOOL,INSTALL IN AND REMOVE FROM CHUCK OF PORTABLE DRILL MOTOR	

DEFENSE WORK MEASUREMENT STANDARD TIME DATA
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OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAL	MVSPP01	256	PART,PLACE IN AND REMOVE FROM VISE	107
U	MAA	MVSQAXX	VARIABLE	VISE(QUICK ACTING),LOOSEN OR TIGHTEN	
U	MAA	MVSRVXX	VARIABLE	VISE,ROTATE	
U	MAA	MVSTLXX		VISE,TIGHTEN OR LOOSEN BY HAND	
U	MAF	MVSTSXX	VARIABLE	TRIPOD(WITH VISE),SET UP TO USE OR TAKE DOWN AFTER USE,EFFECTIVE NET WEIGHT TO 30 POUNDS	
U	MAF	MVSVC01	291	VISE(BENCH),OPEN AND CLOSE(1/4 INCH)	
U	OBW	MVSVT01	173	VISE,TIGHTEN AND LOOSEN WITH WRENCH	
U	MAA	BWHCRXX	VARIABLE	CABLE,ROUTE THROUGH FRAME OPENING	108
U	TUA	BWHGH01	221	GUN(SOLDER),HEAT TIP TO SOLDER TEMPERATURE	
U	MAA	BWHH001	20	HEAT SINK,OPEN AND CLOSE	
U	MAA	BWHIS01	49	INSULATION,STRIP FROM WIRE TO ONE INCH	
U	MAA	BWHITXX	VARIABLE	IRON(SOLDERING),TIN	
U	MAA	BWHLT01	VARIABLE	LACE,TIE CLOVE HITCH AND OVERHAND KNOT	109
U	MAA	BWHLU01	30	LACING(CORD),UNWIND FROM SPOOL PER FOOT	
U	MAA	BWHRWXX	VARIABLE	WIRE,ROUTE PAST POST,PIN OR OBSTRUCTION	
U	MAW	BWHSWXX	VARIABLE	WIRE,STRAIGHTEN WITH PLIERS	
U	MAA	BWHTLXX	VARIABLE	LEAD,TWIST ON TERMINAL	
U	MAA	BWHWBXX	VARIABLE	WIRE,BEND WITH PLIERS	
U	MAW	BWHWB03	46	WIRE,BEND TO FORM LOOP USING PLIERS	110
U	MAA	BWHWB04	18	WIRE,BEND UP TO 120 DEGREES WITH HANDS	
U	MAA	BWHWD01	99	WIRE,DRESS INTO AN INSIDE CORNER	
U	MAA	BWHWR01	20	WIRE,ROUTE IN CHANNEL OR AGAINST FRAME	
U	MAA	BWHWSXX	VARIABLE	WIRE,STRAIGHTEN BY HAND	
U	MAA	BWHWTXX	VARIABLE	WIRES,TWIST TO ROUTE THRU OPENING	111
U	MAA	BWHWT03	32	WIRE,TWIST STRAND OF LEAD	
U	MAA	BWHWU01	54	WIRES-UNTWIST AFTER ROUTE THRU OPENING	
U	MAA	MWHCLXX	VARIABLE	CABLE,LACE WITH KNOT	
U	MAA	MWHHU01	320	HARNESS,UNWRAP VINYL TAPE FROM 1-3 INCHES OF	
U	MAA	MWHHW01	2856	HARNESS,WRAP 1-3 INCHES OF HARNESS WITH 1/2 INCH VINYL TAPE-RESTRICTED	
U	MAA	MWHITXX	VARIABLE	IRON(SOLDERING),TIN BEFORE SOLDERING OR AFTER CLEANING	112
U	MAA	MWHLC01	43	LEAD,CHOOSE FROM WIRE BUNDLE	
U	MAA	MWHLD01	198	LEAD,DRESS WITH PLIERS	
U	MAX	MWHLM01	144	LEAD(COMPONENT),MEASURE AND CUT TWO ENDS TO LENGTH	
U	MAA	MWHLM02	165	LEAD,MEASURE AND CUT TO LENGTH	

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OCCUP-ATION	QUALITY	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION	PAGE
U	MAA	MWHLS01	182	LEAD(COMPONENT),STRAIGHTEN WITH HANDS	112
U	MAA	MWHLT01	51	LEAD,TWIST STRANDED WIRE BY HAND	
U	MAA	MWHLU01	85	LACING CORD,UNWIND ONE FOOT FROM SPOOL	
U	MAA	MWHMA01	418	MARKER(E-Z CODE),APPLY	113
U	MAA	MWHSA01	202	SPAGHETTI,APPLY-MEASURE,CUT AND INSTALL	
U	MAA	MWHSS01	22	SPAGHETTI,SLIDE	
U	MAA	MWHTM01	285	TERMINAL,MOUNT TO CHASIS	
U	MAA	MWHWRXX	VARIABLE	WIRE,ROUTE THROUGH WIRES	
U	MAA	MWHWSXX	VARIABLE	WIRE,STRIP END	
U	TUA	MWHWT01	76	WIRE,TIN LEAD END	
U	MAF	MWHWU01	35	WIRE(OR SOLDER),UNROLL FROM SPOOL,SIX INCH LENGTH	114
U	MAA	BWRLLXX	VARIABLE	LETTER,WRITE,LONGHAND	
U	MAA	BWRLPXX	VARIABLE	LETTER,PRINT,UPPER OR LOWER CASE	
U	MAA	BWRN001	8	INSTRUMENT(WRITING),MOVE TO NEXT WORD WHEN WRITING LONGHAND,LOWER CASE	
U	MAA	BWRN001	18	NUMBER,WRITE,PER DIGIT	
U	MAA	BWRPAXX	VARIABLE	PUNCTUATION,ANNOTATE	
U	MAJ	BWRSWXX	VARIABLE	SYMBOLS,WRITE	115
U	MAA	MWRDWXX	VARIABLE	DATE(CALENDAR),WRITE	
U	MAL	MWRSW01	224	SIGNATURE,WRITE LONGHAND,FIRST NAME,MIDDLE INITIAL,AND LAST NAME	
U	MAM	MWRWWXX	VARIABLE	WORDS,WRITE OR PRINT,SEQUENCE OF FIVE WORDS	
U	MAA	TWRNCXX	TABLE	NUMBER,COPY FROM SOURCE DOCUMENT	116

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AIRCRAFT,BOARD AND DISMOUNT	596	U	NBMAB01	7
ALIGNMENT,CHECK WITH LEVEL	120	U	BGMAC02	19
ALIGNMENT,CHECK WITH STRAIGHTEDGE	103	U	BGMAC01	19
APPLY PRESSURE	VARIABLE	U	BELAPXX	17
APRON,PUT ON AND REMOVE	VARIABLE	U	NJPAPXX	34
AREA,CLEAN WITH AIR,TO NINE SQUARE INCHES	VARIABLE	U	NCLACXX	9
AREA,INSPECT WITH LIGHT	VARIABLE	U	SITAIXX	34
BAG(PAPER),OPEN,PREPARATORY TO PLACE OBJECT IN BAG	25	U	BPKBO01	70
BAG(PAPER),TEAR TO OPEN	VARIABLE	U	NPKBTXX	72
BAR(LOCKING),INSTALL AND REMOVE,TOOL CABINET OR SIMILAR	170	U	NJPBI01	34
BAR(PINCH),USE	159	U	NTLBU01	88
BAR(PRY),USE	VARIABLE	U	BTLBPXX	83
BATTERY,CHECK WATER LEVEL,12 VOLT WATER TYPE BATTERY WITH SIX CELLS	561	U	NITBC01	29
BODY,MOVE SIDEWAYS TO NEW LOCATION WHILE SEATED	83	U	BBMBM01	6
BOLT(OR NUT),LOOSEN OR TIGHTEN WITH WRENCH	VARIABLE	U	BTLWLXX	87
BOOK,OBTAIN FROM OPEN SHELF AND RETURN	VARIABLE	U	SOHBOXX	68
BOOK,OPEN TO MARKED PAGE	97	U	NOHBO01	63
BOOK,REMOVE FROM AND REPLACE IN OPEN BOOKCASE	203	U	NOHBR01	63
BOW,TIE IN STRING ON OBJECT	197	U	BNFBT01	48
BOW,UNTIE	40	U	BNFBU01	48
BOX,OPEN	VARIABLE	U	NPKBOXX	71
BRUSH,CLEAN IN SOLVENT,SMALL BRUSH	194	U	NCLBC01	9
BRUSH,DIP	42	U	BDPBO01	16
BUTTON,DEPRESS(DOORBELL OR SIMILAR)	45	U	NACBO01	2
CABLE,LACE WITH KNOT	VARIABLE	U	NWHCLXX	111
CABLE,REMOVE FROM AND RETURN TO CASE,CABLE ROLLED AND STOWED IN CASE	261	U	SJPCR01	41
CABLE,REMOVE FROM AND RETURN TO CASE,CABLE WOUND ON RACK IN LID	1218	U	SJPCR02	42
CABLE,ROUTE THROUGH FRAME OPENING	VARIABLE	U	BWHCRXX	108
CALIPER(VERNIER),ADJUST SLIDING HEAD,FOUR INCHES	79	U	BITCA01	25
CALIPER(VERNIER),USE TO MAKE ADDITIONAL CHECK ON INSIDE OR OUTSIDE DIMENSION	92	U	BITCU07	26
CALIPER,OPEN OR CLOSE	VARIABLE	U	BITCOXX	25
CALIPER,SET WITH SCALE	VARIABLE	U	BITCSXX	25

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP-ATION	DWMSTOP ELEMENT	PAGE
CALIPER,USE	VARIABLE	U	BITCUXX	25
CALIPER,USE,CHECK OUTSIDE DIAMETER WITH PRE-SET SPRING CALIPER	211	U	BITCU08	26
CAN(HERMETICALLY SEALED),CLOSE OR OPEN	VARIABLE	U	MPKCCXX	72
CAN(METAL),OPEN WITH STATIONARY CRANK TYPE CAN OPENER,EMPTY CONTENTS,AND ASIDE CAN	VARIABLE	U	MPKCOXX	72
CAN,OPEN AND CLOSE,PRY TYPE LID TO SIX INCHES DIAMETER	VARIABLE	U	SPKCOXX	74
CAN,OPEN WITH STATIONARY CRANK TYPE CAN OPENER	VARIABLE	U	BPKCOXX	70
CAN,SCREW CAP ON AND OFF	VARIABLE	U	MPKCSXX	72
CAP(OR PLUG),INSTALL,PLASTIC THREADED	VARIABLE	U	MTFCIXX	81
CAP(OR PLUG),REMOVE,PLASTIC THREADED	VARIABLE	U	MTFCRXX	81
CHISEL(COLD),USE,FIRST OR ADDITIONAL BLOWS	VARIABLE	U	BTLCUXX	83
CLAMP(CLECO),INSTALL OR REMOVE	VARIABLE	U	MCPCLXX	14
CLAMP(C TYPE),INSTALL AND REMOVE	322	U	MCPCI01	14
CLAMP(C TYPE),TIGHTEN OR LOOSEN	75	U	MCPCT01	14
CLAMP(SPRING),INSTALL	46	U	MCPCI02	14
CLAMP(SPRING),INSTALL OR REMOVE,SMALL OR LARGE	VARIABLE	U	MCPSPXX	15
CLAMP,INSTALL AND REMOVE	VARIABLE	U	SCPCIXX	15
CLIPBOARD,OBTAIN,AFFIX,OR REMOVE DOCUMENT AND ASIDE	VARIABLE	U	MOHCOXX	63
CLOTH,WRING TO REMOVE EXCESS FLUID	38	U	BDPCW01	16
COAT,SPRAY(AEROSOL)	VARIABLE	U	MSTCSXX	79
COMPARTMENT(DASH),OPEN AND CLOSE	102	U	MJPCO02	35
COMPARTMENT(TOOL),OPEN OR CLOSE MOUNTED ON TRUCK OR SIMILAR	73	U	MJPCO01	35
COMPONENT(BAYONET TYPE),INSTALL	127	U	MJPCI01	35
COMPONENT(BAYONET TYPE),REMOVE	69	U	MJPCR01	35
COMPOUND(SEAL),SCRAPE OFF	351	U	MCLCS01	10
CONTAINER(PLASTIC),CLOSE,SNAP-ON LID	VARIABLE	U	BPKCCXX	70
CONTAINER,DUMP PARTS	35	U	BOHCD01	62
CONTAINER,DUMP PARTS	129	U	MOHCD01	63
CONTROL(FOOT),OPERATE WITH PRESSURE	70	U	MACCO01	2
CONTROL,ADJUST,ZERO METER WITH TOOL	161	U	MITCA04	30
CONTROL,ADJUST AND OBTAIN DIAL READING	165	U	MITCA01	29
CONTROL,ADJUST KNOB/DIAL AND READ	79	U	MITCA02	29
CONTROL,ADJUST WITH SCREWDRIVER,READ OSCILLOSCOPE	209	U	MITCA03	30
CONTROLS,SET	VARIABLE	U	MACCSXX	3

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
CORD(ELECTRIC),CONNECT AND DISCONNECT	VARIABLE	U	MJPCCXX	35
CORD(ELECTRIC EXTENSION),UNCOIL,CONNECT, DISCONNECT AND COIL	1186	U	MJPCU01	35
CORROSION,REMOVE FROM SPOT ON SURFACE	VARIABLE	U	SCLCRXX	13
COVER,REMOVE FROM PLASTIC CONTAINER,SNAP ON COVER,1-7 INCHES DIAMETER	39	U	BPKCR01	70
COVERALLS,PUT ON AND REMOVE	1145	U	MJPCP01	35
CRANK,ENGAGE ON SPLINES	31	U	BACCE01	1
CRANK,MOVE MOTIONS	TABLE	U	TACCMXX	5
CRANK,TURN WITH CRANKING MOTION AND ALIGN	TABLE	U	TACCTXX	5
CRANK,WITH CRANKING MOTIONS	TABLE	U	TACCCXX	4
CREAM(HAND),APPLY	VARIABLE	U	SJPCAXX	41
DATE(CALENDAR),WRITE	VARIABLE	U	MWRDWXX	115
DATE,CHANGE,ADJUSTABLE RUBBER DATE STAMP	126	U	MIDDC01	22
DECAL(NON-PRESSURE SENSITIVE),INSTALL	346	U	MIDDI01	22
DECAL(PRESSURE SENSITIVE),INSTALL,TO 1.5 X 2.5 INCHES	448	U	SIDDI01	24
DECAL,REMOVE WITH TOOL	368	U	MIDDR01	22
DIAL,CLEAN WITH CLOTH	61	U	BCLDC01	8
DIE(OR TAP),ASSEMBLE TO OR DISASSEMBLE FROM CHUCK OR HANDLE,HAND-HELD	VARIABLE	U	MTLDAXX	89
DIE(OR TAP),LUBRICATE WITH OIL FROM LEVER OR DIAPHRAGM TYPE CAN	56	U	BLUDL01	46
DIGIT(S)(MIXED NUMBER),READ & RETAIN	VARIABLE	U	BRDDRXX	76
DIGIT(S),ALPHA-NUMERIC,READ & RETAIN EYE TRAVEL TO & FROM NUMBER	TABLE	U	TRDDAXX	77
DIGIT(S),NUMERIC,READ & RETAIN,EYE TRAVEL TO & FROM NUMBER	TABLE	U	TRDDNXX	77
DIMENSION,MEASURE AND MARK	TABLE	U	SLDDMXX	45
DIPSTICK,WIPE WITH CLOTH	45	U	BCLDW01	8
DISENGAGE ONE OBJECT FROM ANOTHER OBJECT	VARIABLE	U	BELDEXX	17
DOCUMENT,ATTACH TO ITEM WITH RUBBER BAND	212	U	MPHDA01	69
DOCUMENT,DETACH FROM ITEM AND UNROLL,DOCUMENT SECURED WITH RUBBER BAND	139	U	MPHDD01	69
DOCUMENT,REMOVE FROM AND RETURN TO PLASTIC BAG	128	U	MPHDR02	70
DOCUMENT,REMOVE FROM BAG,UNFOLD,FOLD,AND REPLACE IN BAG	275	U	MPHDR01	70
DOOR(CABINET),CLOSE AND OPEN,SWING OR SLIDE	VARIABLE	U	MJPDCXX	36
DOOR(CABINET),CLOSE AND OPEN,UNLOCK AND LOCK	276	U	MJPDC05	36
DOOR(CABINET),CLOSE AND OPEN,SINGLE OR DOUBLE WITH LOCKING HANDLE OR KNOB	128	U	MJPDC06	36

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
DOOR(CABINET),CLOSE AND OPEN,SECURED WITH PIN LATCH	349	U	MJPDCO7	36
DOOR(OFFICE),UNLOCK	143	U	MOHDUO1	65
DOOR(OVERHEAD),RAISE AND LOWER,MANUALLY	463	U	MOHDRO1	65
DOOR(PASSAGE),CLOSE,SLIDING	138	U	MOHDO10	64
DOOR(PASSAGE),OPEN,SLIDING	111	U	MOHDO09	64
DOOR(PASSAGE),OPEN AND CLOSE WITH DOORKNOBS PUSH OR PULL REQUIRED TO OPEN DOOR	108	U	MOHDO01	63
DOOR(PASSAGE),OPEN AND CLOSE,WITH DOORKNOBS AND CLOSER MECHANISM,PUSH REQUIRED TO OPEN DOOR	68	U	MOHDO02	63
DOOR(PASSAGE),OPEN AND CLOSE,WITH DOORKNOB, PULL TO OPEN,WITH AUTOMATIC CLOSER	90	U	MOHDO03	64
DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PUSH TO OPEN,WITH AUTOMATIC DOOR CLOSER	75	U	MUHDO04	64
DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PULL TO OPEN,WITH AUTOMATIC DOOR CLOSER	114	U	MUHDO05	64
DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE PUSH TO OPEN,WITH AUTOMATIC CLOSER	91	U	MUHDO06	64
DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE, PULL TO OPEN,WITH AUTOMATIC CLOSER	127	U	MOHDO07	64
DOOR(PASSAGE),OPEN AND CLOSE,TWO-WAY SWINGING	75	U	MUHDO08	64
DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK	492	U	SUGOUO1	62
DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK	719	U	SUGOUO2	62
DRAWER(STORAGE),OPEN AND CLOSE	VARIABLE	U	MJPDOXX	36
DRAWER(TOOL BOX),OPEN AND CLOSE	30	U	MJPDO09	37
DRILL,POSITION FOR DRILLING,HAND HELD PORTABLE POWER DRILL	VARIABLE	U	MTPDPXX	105
DRUM(STORAGE),OPEN	170	U	MPKDO01	72
EARMUFFS,PUT ON AND REMOVE	131	U	MJPEPO1	37
EDGE,MASK WITH PAPER TAPE	VARIABLE	U	MNFEMXX	49
ENVELOPE(PARTS),OPEN AND REMOVE CONTENTS	VARIABLE	U	MPKEOXX	72
ENVELOPE,OPEN,EMPTY,AND ASIDE	TABLE	U	TPKEOXX	74
ENVELOPE,OPEN BY TEARING END	VARIABLE	U	BPKEOXX	71
EXTENDED DISTANCE	7	U	BELEDO1	18
EYE,FOCUS ON OBJECT	7	U	BELEFO1	18
EYE,TRAVEL	VARIABLE	U	BELETXX	18
EYE,TRAVEL FROM POINT TO POINT TO INSPECT	TABLE	U	TITETXX	32
EYE TIMES,SHIFT FROM POINT TO POINT	VARIABLE	U	BITETXX	26
FASTENER(THREADED),GET(EASY)AND START(VISIBLE)	VARIABLE	U	MTFFGXX	81

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
HAMMER(LIGHT),STRIKE ONE BLOW	VARIABLE	U	BTLHLXX	84
HAMMER(MEDIUM),STRIKE ONE BLOW	VARIABLE	U	BTLHMXX	84
HAMMER,USE,STRIKE ONE BLOW	TABLE	U	TTLHUXX	98
HAND,IMMERSE IN FLUID,REMOVE,AND SHAKE TO REMOVE EXCESS	40	U	BDPHIO1	16
HAND,WIPE WITH CLOTH OR PAPER TOWEL	160	U	MCLHWO2	10
HANDLE("T"),ENGAGE AND DISENGAGE OR USE TO TURN OBJECT	VARIABLE	U	BTLWHXX	87
HANDLE(SPEED),ATTACH TO AND REMOVE FROM PART OR TURN HANDLE ONE THREAD	VARIABLE	U	BTLWSXX	87
HANDS,CLEAN BY DIPPING IN FLUID CLEANER	420	U	MCLHCO1	10
HANDS,WIPE WITH CLOTH OR PAPER TOWEL	271	U	MCLHWO1	10
HARNESS,UNWRAP VINYL TAPE FROM 1-3 INCHES OF	320	U	MWHHUO1	111
HARNESS,WRAP 1-3 INCHES OF HARNESS WITH 1/2 INCH VINYL TAPE-RESTRICTED	2856	U	MWHHWO1	111
HAT,PUT ON AND REMOVE	VARIABLE	U	MJPHPXX	38
HATCHET,USE,STRIKE FIRST OR ADDITIONAL BLOW	VARIABLE	U	BTLHUXX	84
HEAT SINK,OPEN AND CLOSE	20	U	BWHHOO1	108
HOLE,COUNTERSINK OR DEBURR,1/16 INCH DEPTH AND TO 5/8 INCH DIAMETER,ALUMINUM MATERIAL	VARIABLE	U	MTPHCXX	105
HOLE,REAM BY HAND	VARIABLE	U	MTLHRXX	89
HOLE,TAP	VARIABLE	U	STLHTXX	103
HOOK("S"),REMOVE FROM PART	42	U	MOHHRO1	65
HOOK,ATTACH AND DETACH TO/FROM ITEM	197	U	MOHHAO1	65
HOOK,PLACE IN PART,S-TYPE HOOK	56	U	BOHHPO1	62
HORIZONTAL CHANGE(SIDESTEP OR TURN BODY)	19	U	BBMHCO1	6
HOSE(AIR),CONNECT OR DISCONNECT	VARIABLE	U	MJPHCXX	38
HOSE(AIR),WIND FOR STORAGE,25 FEET LONG	557	U	MJPHWO1	38
INDICATOR(DIAL),ASSEMBLE TO MAGNETIC BASE	224	U	MJPIAO1	38
INDICATOR(DIAL),ASSEMBLE TO HEIGHT GAUGE	373	U	MJPIAO2	38
INDICATOR(DIAL),DISASSEMBLE FROM MAGNETIC BASE	179	U	MJPIDO1	38
INDICATOR(DIAL),DISASSEMBLE FROM HEIGHT GAUGE	282	U	MJPIDO2	38
INDICATOR(DIAL),READ	44	U	BITIRO1	27
INDICATOR(DIAL),SET	62	U	MITISO1	31
INDICATOR(DIAL),SET TO ZERO	49	U	BITISO1	27
INDICATOR(DIAL),USE TO CHECK POSITION OR SPOT	26	U	BITOIO1	26
INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE,FIRST INCH	14	U	BITIUO1	27
INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE	10	U	BITIUO2	27

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
INDICATOR(DIAL),USE TO CHECK MANDREL RUNOUT PER DIAMETER	95	U	BITMR01	27
INDICATOR,ADJUST TO WORK,MAGNETIC BASE INDICATOR	182	U	MITIA01	31
INK(OR PAINT),APPLY TO STENCIL WITH DAUBER	VARIABLE	U	MIDAIXX	22
INK(OR PAINT),APPLY TO STENCIL W/ROLLER	VARIABLE	U	MIDIAXX	23
INSTRUMENT(WRITING),MOVE TO NEXT WORD WHEN WRITING LONGHAND,LOWER CASE	8	U	BWRMO01	114
INSULATION,STRIP FROM WIRE TO ONE INCH	49	U	BWHIS01	108
IRON(SOLDERING),CLEAN BY SHAKING	44	U	MCLIC01	10
IRON(SOLDERING),TIN	VARIABLE	U	BWHITXX	108
IRON(SOLDERING),TIN BEFORE SOLDERING OR AFTER CLEANING	VARIABLE	U	MWHITXX	112
ITEM,LOCATE IN COLUMN STARTS-WITH BOOK OPEN TO DESIRED PAGE AND EYES	98	U	BRDIL01	76
JACKET,PUT ON AND REMOVE	324	U	MJPJP01	38
JAR,CLOSE,LID SCREWED ON HAND TIGHT	109	U	MPKJC01	73
JAR,CLOSE,SCREW TYPE LID	62	U	BPKJC01	71
JAR,OPEN,SCREW TYPE LID	66	U	BPKJO01	71
JAR,OPEN,SCREW TYPE LID	113	U	MPKJO01	73
JAW(PARALELL),TIGHTEN OR LOOSEN	VARIABLE	U	MCPPJXX	14
KEY,INSTALL,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS NEEDED	87	U	MNFKI02	50
KEY,INSTALL,STRAIGHT MACHINE,TIGHT FIT,USE OF HAMMER AND DRIFT PUNCH REQUIRED	293	U	MNFKI03	50
KEY,INSTALL,WOODRUFF WITH HAMMER AND DRIFT PUNCH	311	U	MNFKI01	50
KEY,REMOVE,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS REQUIRED	38	U	MNFKR02	50
KEY,REMOVE,STRAIGHT MACHINE,HAMMER AND DRIFT PUNCH REQUIRED	258	U	MNFKR03	50
KEY,REMOVE,TAPERED MACHINE,HAMMER AND PUNCH REQUIRED	286	U	MNFKR04	50
KEY,REMOVE,WOODRUFF,WITH HAMMER AND DRIFT PUNCH	370	U	MNFKR01	50
KNIFE(POCKET),OPEN AND CLOSE	136	U	SJPKO01	42
KNIFE,USE,TO CUT OR SCRAPE,PER STROKE	VARIABLE	U	BTLKUXX	84
KNOB(CONTROL),UNLOCK AND LOCK	74	U	MACKU01	3
KNOB,DIAL SET OR ALIGN POINTER WITH TURN UP TO 180 DEGREES	VARIABLE	U	BACKOXX	1
KNOT,TIE(ROPE),BARREL HITCH,TIMBER HITCH,OR STOPPER	267	U	BNFKT09	49
KNOT,TIE(ROPE),BOWLINE	100	U	BNFKT08	49

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUPATION	DWMSTDP ELEMENT	PAGE
KNOT,TIE(ROPE),CLOVE HITCH	147	U	BNFKT07	48
KNOT,TIE(ROPE),HALF HITCH	78	U	BNFKT06	48
KNOT,TIE(ROPE),SQUARE	164	U	BNFKT10	49
KNOT,TIE(STRING),BOWLINE,USING SINGLE END OF LINE	83	U	BNFKT05	48
KNOT,TIE,(STRING),SLIP HALF HITCH,USING SINGLE END OF LINE	95	U	BNFKT03	48
KNOT,TIE,CLOVE HITCH,USING SINGLE END OF LINE	70	U	BNFKT04	48
KNOT,TIE,HALF HITCH,USING SINGLE END OF LINE	101	U	BNFKT02	48
KNOT,TIE,SQUARE,USING TWO ENDS OF STRING	215	U	BNFKT01	48
LACE,TIE CLOVE HITCH AND OVERHAND KNOT	VARIABLE	U	BWHLT01	109
LACING(CORD),UNWIND FROM SPOOL PER FOOT	30	U	BWHLU01	109
LACING CORD,UNWIND ONE FOOT FROM SPOOL	85	U	MWHLU01	112
LADDER(EXTENSION),CLIMB AND DESCEND	VARIABLE	U	MBMCLXX	7
LADDER(VERTICAL),CLIMB UP AND DOWN ONE RUNG OR STEP	VARIABLE	U	MBMLCXX	7
LADDER,MOVE TO NEW LOCATION	211	U	MJPLM01	39
LATCH,TURN TO CLOSE BOX OR CONTAINER	48	U	MNFLT01	51
LATCH,TURN TO OPEN BOX OR CONTAINER	47	U	MNFLT02	51
LEAD(COMPONENT),MEASURE AND CUT TWO ENDS TO LENGTH	144	U	MWHLM01	112
LEAD(COMPONENT),STRAIGHTEN WITH HANDS	182	U	MWHLS01	112
LEAD,CHOOSE FROM WIRE BUNDLE	43	U	MWHLC01	112
LEAD,DRESS WITH PLIERS	198	U	MWHLD01	112
LEAD,MEASURE AND CUT TO LENGTH	165	U	MWHLM02	112
LEAD,TWIST ON TERMINAL	VARIABLE	U	BWHTLXX	109
LEAD,TWIST STRANDED WIRE BY HAND	51	U	MWHLT01	112
LEG,MOVE,TO 21 INCHES	VARIABLE	U	BBMLMXX	6
LETTER,PRINT,UPPER OR LOWER CASE	VARIABLE	U	BWRLPXX	114
LETTER,WRITE,LONGHAND	VARIABLE	U	BWRLLXX	114
LEVER(NON-SQUEEZE),UNLATCH OR LATCH	13	U	BACLU01	1
LEVER,ENGAGE,OR DISENGAGE	37	U	MACLE01	3
LEVER,MOVE	TABLE	U	TACLMXX	5
LEVER,SEAT TO MESH GEARS	16	U	BACLS01	1
LEVER,TURN ON AND OFF(AIR VALVE OR SIMILAR)	102	U	MACLT01	3
LEVER,UNLATCH TO DISENGAGE,SQUEEZE TYPE LATCH	19	U	BACLU02	1
LID(BOX),REMOVE	45	U	MPKLR01	73
LID,CLOSE,PRY OPEN TYPE CAN TO 6 INCHES DIAMETER	306	U	MPKLC01	73

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	UWMSTOP ELEMENT	PAGE
LID, INSTALL AND SEAL ON FIVE-GALLON CONTAINER, 16 PRY TABS	1016	U	MPKLI02	73
LID, INSTALL ON CAN	160	U	MPKLI01	73
LID, PRY OFF CAN TO 6-INCH DIAMETER	382	U	MPKLP01	73
LID, REMOVE AND REPLACE, TRASH CAN OR SIMILAR TO 24 INCHES DIAMETER	VARIABLE	U	MUHLRXX	65
LID, REMOVE FROM FIVE-GALLON CONTAINER, 16 PRY TABS	744	U	MPKLR02	73
LINE, DRAW USING SQUARE	43	U	BLOLD01	43
LINE, SCRIBE, EXACT POSITION, METAL SURFACE	125	U	MLOLS13	45
LINE, SCRIBE, TO SCALE OR STRAIGHTEDGE	VARIABLE	U	BLOLSXX	43
LINE, SCRIBE TO SCALE (STRAIGHTEDGE)	VARIABLE	U	MLOLSXX	44
LOCK (LATCH), CLOSE AND LOCK	VARIABLE	U	MNFLCXX	51
LOCK (LATCH), OPEN AND MOVE ASIDE	VARIABLE	U	MNFLOXX	51
LUBRICANT, APPLY TO FITTING WITH BUTTON TYPE GUN	34	U	BLUGB01	46
LUBRICANT, APPLY TO FITTING WITH HAND OPERATED LEVER TYPE GUN (PER STROKE)	36	U	BLUGL01	46
LUBRICANT, APPLY TO SMALL OBJECT	VARIABLE	U	SLUALXX	47
LUBRICANT, APPLY TO ZERK FITTING WITH HAND OPERATED GUN	TABLE	U	SLULAXX	47
LUBRICANT, APPLY WITH OIL CAN (PER LINEAR FOOT)	23	U	BLUOL01	46
LUBRICANT, APPLY WITH TUBE TO AREA, 1 INCH X 1 INCH	26	U	BLUTA01	46
LUBRICANT, APPLY WITH TUBE TO SPOT, 1/4X1/4 INCH	20	U	BLUTS01	47
MACHINE, START AND STOP WITH PUSH BUTTON OR ROTARY SWITCH	104	U	MACMS01	3
MACHINE, START OR STOP (PUSH TYPE SWITCH)	34	U	MACMS02	3
MARKER (E-Z CODE), APPLY	418	U	MWHMA01	113
MASK (FACE), PUT ON AND REMOVE, AIR FILTERING, DISPOSABLE TYPE MASK	204	U	MJPMP01	39
MATERIAL (CLOTH), CUT WITH SCISSORS	VARIABLE	U	MTLMCXX	90
MATERIAL, CUT ALONG STRAIGHTEDGE WITH KNIFE	VARIABLE	U	BTLMCXX	84
MATERIAL, MEASURE LENGTH OF	VARIABLE	U	MGMHMXX	20
MICROMETER (DEPTH), USE WITH PARALLEL BARS	VARIABLE	U	SITMUXX	34
MICROMETER (INSIDE), SET UP WITH TWO EXTENSIONS	1659	U	SJPMS01	43
MICROMETER (OUTSIDE), MEASURE DIMENSION AND READ	TABLE	U	TITMMXX	33
MICROMETER, MEASURE DEPTH	VARIABLE	U	MITMMXX	31
MICROMETER, USE	VARIABLE	U	MITMUXX	31
MICROMETER, USE (REMOVE AND REPLACE EXTENSION ON INSIDE MICROMETER)	343	U	MITMU06	31

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTOP ELEMENT	PAGE
MICROMETER,USE-CHECK OBJECTS OF DIFFERENT SIZE	427	U	MITMU04	31
MICROMETER,USE-CHECK OBJECTS OF SAME SIZE	380	U	MITMU05	31
MICROMETER,USE,CHANGE POSITION OF THIMBLE FOR MAKING CHECK OF SIZE DIFFERENT FROM PRIOR CHECK	140	U	BITMU03	28
MICROMETER,USE,CHECK INSIDE DIAMETER OR BETWEEN TWO SURFACES	265	U	MITMU07	32
MICROMETER,USE,READ SCALE	VARIABLE	U	BITMUXX	28
MICROMETER,USE,TO CHECK PART(CHANGE SETTING,BIT-MU-03,NOT NECESSARY)	74	U	BITMU05	28
MICROMETER,USE TO CHECK PART AFTER CHANGE SETTING,BIT-MU-03	22	U	BITMU04	28
NAIL,SET AND DRIVE	TABLE	U	TNFNSXX	57
NOZZLE(AEROSOL PAINT SPRAY CAN),CLEAR	67	U	MPTNC01	76
NUMBER(S),ALPHA-NUMERIC,READ AND VERIFY,EYE TRAVEL FROM DOCUMENT TO DOCUMENT	TABLE	U	TRDNAXX	77
NUMBER(S),NUMERIC,READ & VERIFY,EYE TRAVEL FROM DOCUMENT TO DOCUMENT	TABLE	U	TRDNNXX	78
NUMBER,COPY FROM SOURCE DOCUMENT	TABLE	U	TWRNCXX	116
NUMBER,READ,FIRST OR ADDITIONAL,NO EYE TRAVEL	VARIABLE	U	BRDNRXX	76
NUMBER,WRITE,PER DIGIT	18	U	BWRN001	114
NUMBERS,MULTIPLY(READ,TRANSPOSE)	TABLE	U	TOGNMXX	61
NUT(SMALL),POSITION AND ENGAGE ON BOLT	57	U	BTFNP02	79
NUT,POSITION ON STUD	32	U	BTFNP01	79
NUT AND WASHER,POSITION ON STUD	VARIABLE	U	MTFNPXX	82
OBJECT(HEAVY),SLIDE ON FLOOR	590	U	MOHOS01	66
OBJECT,CLEAN,PER STROKE	TABLE	U	TCLOCXX	12
OBJECT,CLEAN WITH BRUSH,PER SQUARE FOOT	VARIABLE	U	MCLOCXX	10
OBJECT,CLEAN WITH BRUSH AND SOLVENT	88	U	MCLOC03	10
OBJECT,DIP IN VISCOUS MATERIAL SUCH AS GREASE, RED LEAD OR SIMILAR	63	U	BDPDO01	17
OBJECT,EXAMINE SURFACE CONDITION VISUALLY WITH NAKED EYE	TABLE	U	TITOEXX	33
OBJECT,GAIN CONTROL AFTER GET HANDFUL OF OBJECTS	38	U	BOHOG01	62
OBJECT,GET,PLACE TO USE,AND PLACE ASIDE	TABLE	U	TPLOGXX	75
OBJECT,GET AND PLACE	TABLE	U	TGTOGXX	21
OBJECT,HANG ON HOOK	VARIABLE	U	SOHOHXX	68
OBJECT,IMMERSE IN LIQUID OR PASTE	TABLE	U	TDPOIXX	17
OBJECT,OBTAIN	TABLE	U	TGTOOXX	21
OBJECT,PENCIL,GET FROM SHIRT POCKET	65	U	MOHOG01	66

OPERATION/ELEMENT DESCRIPTION	THU VALUE	OCCUP-ATION	DWMSTOP ELEMENT	PAGE
OBJECT,PICK UP AND SET DOWN	VARIABLE	U	MOHPOXX	66
OBJECT,PLACE IN SHIRT POCKET,SUCH AS PENCIL, SCRIBE,OR SCALE	73	U	MOHOPO1	66
OBJECT,PLACE WITH A COMBINATION OF MOVE AND/OR POSITION MOTIONS USING THE HAND(S) OR FINGERS	TABLE	U	TPLOPXX	75
OBJECT,REPOSITION AT WORKPLACE BY SLIDING OR LIFTING AND TURNING,OBJECT TO 50 POUNDS WEIGHT,TURN TO 180 DEGREES	TABLE	U	TOHORXX	67
OBJECT,START MOVEMENT BY PUSHING	42	U	MMHOSO1	47
OBJECT,START MOVING BY PUSHING(WHEELED OBJECT)	30	U	BMHOSO1	47
OBJECT,TURN ABOUT HORIZONTAL OR VERTICAL AXIS TO 180 DEGREES,OBJECT ATTACHED TO STAND OR FIXTURE,EFFECTIVE NET RESISTANCE(ENR) TO 50 POUNDS	TABLE	U	TOHOTXX	67
OBJECT,UNWRAP	178	U	MPKOUO1	74
OBJECT,WASH	VARIABLE	U	MCLOWXX	10
OIL,APPLY TO SPOT WITH DIAPHRAGM TYPE OIL CAN	15	U	BLUOSO2	46
OIL,APPLY TO SPOT WITH TRIGGER TYPE OIL CAN	18	U	BLUOSO1	46
PAGE,FIND,IN MANUAL	214	U	MRDPFO1	76
PAINT(GREASE OR VARNISH),APPLY WITH BRUSH	63	U	BPAPAO1	68
PAINT,APPLY TO IDENTIFICATION PLATE	609	U	MIDPAO1	23
PAINT,APPLY WITH BRUSH	VARIABLE	U	SPAPAXX	69
PAINT,APPLY WITH BRUSH ATTACHED TO BOTTLE CAP	VARIABLE	U	SPAAPXX	69
PAINT,SPRAY	VARIABLE	U	BPAPSXX	69
PAINT,SPRAY	VARIABLE	U	MPAPSXX	69
PAPER(STENCIL),CUT ON PAPER CUTTER	VARIABLE	U	NJPPCXX	39
PART,CLEAN(BY HAND)WITH SOLVENT	TABLE	U	TCLPCXX	12
PART,CLEAN WITH AIR	VARIABLE	U	MCLPCXX	11
PART,CLEAN WITH RAG	VARIABLE	U	BCLPCXX	9
PART,HANG WITH "S" HOOK	VARIABLE	U	BDHPHXX	62
PART,IMMERSE AND SHAKE	VARIABLE	U	BDPPIXX	17
PART,INSTALL INTO HOLE OR ONTO SHAFT	TABLE	U	TDAPIXX	16
PART,LOOSEN WITH MALLET AND REMOVE	TABLE	U	TTLPLXX	98
PART,PICK UP AND SET DOWN	180	U	MOHPPO1	66
PART,PLACE IN AND REMOVE FROM VISE	256	U	MVSPPO1	107
PART,REMOVE FROM MATING PART BY PUSHING WITH THUMBS	95	U	MDAPRO8	16
PART,REMOVE FROM MATING PART WITH FINGER	107	U	MDAPRO9	16
PART,REMOVE FROM MOUNTING LOCATION OR MATING PART	VARIABLE	U	MDAPRXX	15
PART,REMOVE FROM MOUNTING LOCATION OR MATING PART,TIGHT FITTING PARTS	156	U	MDAPRO7	15

OPERATION/ELEMENT DESCRIPTION	THU VALUE	OCCUPATION	DWNSTOP ELEMENT	PAGE
PART,REMOVE WITH PRY TOOL	121	U	SOHPRO1	68
PARTS, SEPARATE BY PULLING	VARIABLE	U	BOHPSXX	63
PASTE,APPLY WITH BRUSH	173	U	MNFPAO1	51
PEDAL,DEPRESS	33	U	BACPOO1	1
PIN,INSTALL,VARIOUS TYPES	VARIABLE	U	MNFPIXX	52
PIN,PREPARE TO PRESS(INSTALLATION)	107	U	MNFPPO2	52
PIN,PREPARE TO PRESS(REMOVAL)	40	U	MNFPPO1	52
PIN,REMOVE,VARIOUS TYPES	VARIABLE	U	MNFPRXX	53
PLATE,MASK EDGES WITH TAPE PRIOR TO PAINTING	VARIABLE	U	SJPPMXX	43
PLIERS(CONVENTIONAL),USE TO CUT,CRIMP,OR GRIP AN OBJECT	VARIABLE	U	BTLPCXX	85
PLIERS(SLIP JOINT),ADJUST	75	U	BTLPAO2	85
PLIERS(VISE GRIP),CLOSE ON OBJECT AND OPEN TO REMOVE	65	U	BTLPCO3	85
PLIERS(VISE GRIP)ADJUST	72	U	BTLPAO1	84
PLUG(OR CAP),INSTALL,NON-THREADED PLASTIC	93	U	MNFIPO1	49
PLUG(OR CAP),REMOVE,NON-THREADED PLASTIC, USING A SCREWDRIVER	VARIABLE	U	MNFRPXX	53
PLUG,INSERT IN AND REMOVE FROM RECEPTACLE	112	U	MJPPIO1	39
PLUG,PUT IN AND REMOVE FROM EAR	685	U	MJPPPO1	39
PLYWOOD,MANHANDLE	VARIABLE	U	SOHPMXX	68
POINT,MARK	50	U	BLOPMO1	44
POINT,MARK WITH PENCIL	188	U	MLOPMO1	45
POSITION,CHANGE	TABLE	U	TBMPCXX	8
PRESS(ARBOR),ACTUATE TO INSTALL OR REMOVE PIN OR CYLINDRICAL PART	TABLE	U	TNFPAXX	58
PUMP(PRESSURE),PUMP	VARIABLE	U	STLPPXX	104
PUNCH(CENTER),STRIKE	97	U	MTLPSO1	90
PUNCTUATION,ANNOTATE	VARIABLE	U	BWRPAXX	114
RAG,GET FROM COVERED CAN	137	U	MJPRGO1	39
RATCHET(AND SOCKET),ENGAGE ON AND DISENGAGE FROM PART	26	U	BTLWRO1	87
RATCHET,USE TO TURN PART	TABLE	U	TTLWRXX	99
REAMER,ASSEMBLE,POSITION,DISASSEMBLE	572	U	STLRAO1	104
REGRASP	6	U	BELRGO1	18
RETAINER(TRU-ARC),INSTALL OR REMOVE	VARIABLE	U	MNFRTXX	54
RETAINER,REMOVE,RING,SPRING,LOCKWIRE OR FLAT STEEL,USING TOOLS	865	U	MNFRRO2	53
RETAINER,REMOVE,SNAP ON CLIP TYPE,USING PLIERS	146	U	MNFRRO3	53

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
RETAINER,REMOVE,SNAP RING,INTERNAL OR EXTERNAL USING SNAP RING PLIERS	136	U	MNFRR01	53
RING(SNAP),INSTALL,INTERNAL OR EXTERNAL,UP TO ONE INCH FROM END OF PART USING SPECIAL SNAP RING PLIERS	271	U	MNFRI01	53
ROD,EXAMINE VISUALLY WITH NAKED EYE	VARIABLE	U	BITREXX	29
RULE(SIX-FOOT FOLDING),USE	VARIABLE	U	MGMRUXX	20
RULE,READ TO COMPARE MARK ALIGNMENT	22	U	BGMRR01	20
SCALE,USE	VARIABLE	U	MGMSUXX	20
SCISSORS(OR SHEARS),CUT	VARIABLE	U	BTLSSXX	86
SCREW,TURN IN AND TIGHTEN OR LOOSEN AND TURN OUT WITH SCREWDRIVER	VARIABLE	U	MTLSTXX	91
SCREWDRIVER(SPIRAL),USE	TABLE	U	TTLSPXX	98
SCREWDRIVER,CONVENTIONAL,USE	VARIABLE	U	BTLSCXX	85
SCREWDRIVER,RATCHET,USE	VARIABLE	U	BTLSRXX	86
SCREWDRIVER,USE FOR FINAL TIGHTEN OR INITIAL LOOSEN	31	U	BTLSU01	86
SEATBELT,FASTEN AND UNFASTEN	177	U	MEVSF01	19
SHEET(S),SCAN FOR FAMILIAR REFERENCE POINT(S), LETTER SIZE SHEETS	TABLE	U	TRDSSXX	78
SHOVEL,USE	221	U	MTLSU02	91
SHOVEL,USE,TO MOVE LOOSE MATERIAL SUCH AS SAND OR GRAVEL	155	U	MTLSU01	91
SIGNATURE,WRITE LONGHAND,FIRST NAME,MIDDLE INITIAL,AND LAST NAME	224	U	MWRSW01	115
SIT AND STAND	VARIABLE	U	BBMSSXX	6
SMOCK(TIE TYPE),PUT ON AND REMOVE	879	U	MJPSP01	40
SNIPS,OPEN ,POSITION TO WORK,CLOSE AND PLACE ASIDE	99	U	MTLSO01	91
SOCKET,ATTACH TO ADAPTER AND ATTACH ADAPTER TO HANDLE	132	U	BTLSA01	85
SOCKET,CHANGE,1/4,3/8,OR 1/2 INCH DRIVE WITH BALL AND SOCKET LOCK	121	U	MTLSC01	90
SOCKET,DISENGAGE FROM ADAPTER AND REMOVE ADAPTER FROM HANDLE	62	U	BTLSD01	85
SPAGHETTI,APPLY-MEASURE,CUT AND INSTALL	202	U	MWHSA01	113
SPAGHETTI,SLIDE	22	U	MWHSS01	113
SPOT,CLEAN ON FLAT OR IRREGULAR SURFACE WITH PICK AND AIR	VARIABLE	U	SCLCSXX	13
SQUARE,ALIGN TO MARK	44	U	BGMSA01	20
SQUARE,USE(PART IN HAND)	139	U	BGMSU01	20
SQUARE,USE(PART ON BENCH)	216	U	BGMSU02	20
STAMP(GANG),SET UP(10 MARKERS)	2800	U	MIDSS01	23

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
STAMP(METAL),STRIKE WITH HAMMER	65	U	BIDSS01	22
STAMP(RUBBER),APPLY	VARIABLE	U	MIDASXX	22
STAPLE,INSTALL WITH PLIER GRIP STAPLER	51	U	MNFSI01	54
STAPLE,REMOVE,3/8 OR 1/2 INCH,USING PLIER TYPE STAPLE REMOVER	86	U	MNFSR01	54
STENCIL,AFFIX ON ROLL STAMP,TEST AND REMOVE	219	U	MJPSA01	39
STENCIL,APPLY,PAINT,AND REMOVE	1416	U	SIDSA01	24
STENCIL,APPLY WITH BLOCK STAMP	94	U	MIDSA01	23
STENCIL,CUT,ELECTRIC	VARIABLE	U	MTLSEXX	90
STENCIL,CUT,MANUAL	VARIABLE	U	MTLSMXX	90
STENCIL,POSITION TO SURFACE	68	U	MIDSP01	23
STEPLADDER,OBTAIN FROM FLOOR,SET UP,TAKE DOWN, AND ASIDE TO FLOUR,LADDER TO 12 FEET TALL	772	U	NJPS001	40
STRAIGHTEDGE,ALIGN,TO POINTS OR LINE	189	U	BLOSA01	44
STRAIGHTEDGE,CLAMP TO PART WITH THREE C-CLAMPS	994	U	SJPSC01	43
STRING,CUT AND OPEN BAG	158	U	MPKSC01	74
SURFACE(LINEAR),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK	VARIABLE	U	BLUBLXX	45
SURFACE(SPOT),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK	VARIABLE	U	BLUBSXX	46
SURFACE,CLEAN,WITH BRUSH,MEDIUM RESISTANCE	VARIABLE	U	MCLSCXX	11
SURFACE,CLEAN WITH AIR	160	U	BCLSC06	9
SURFACE,CLEAN WITH SANDPAPER	1584	U	MCLSC03	11
SURFACE,CLEAN WITH SCRAPER		U	BCLSCXX	9
SURFACE,CLEAN WITH SOLVENT AND CLOTH	VARIABLE	U	SCLSCXX	13
SURFACE,CLEAN WITH WIRE BRUSH	476	U	BCLSC05	9
SURFACE,CLEAN WITH WIRE BRUSH,EMERY CLOTH AND RAG-PER FOUR LINEAR INCHES	334	U	MCLSC04	11
SURFACE,SCRAPE TO CLEAN	VARIABLE	U	MCLSSXX	11
SURFACE,WIPE WITH CLOTH	VARIABLE	U	MCLSWXX	11
SURFACE,WIPE WITH WET CLOTH	VARIABLE	U	SCLSWXX	14
SWITCH,PUSH TO TURN ON OR OFF	VARIABLE	U	BACSPXX	1
SWITCH,TURN	VARIABLE	U	BACSTXX	2
SWITCHES,OPERATE,CONTROL PANEL	VARIABLE	U	MACSOXX	3
SYMBOLS,WRITE	VARIABLE	U	BWRSWXX	115
TAG(OR ENVELOPE),ATTACH TO OBJECT WITH WIRE (TWISTED)	271	U	MIDTA05	24
TAG,ATTACH STRING	436	U	MIDTA04	24
TAG,ATTACH TO OBJECT,WITH STRING(TIED)	239	U	MIDTA01	23

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP-ATION	DWMSTDP ELEMENT	PAGE
TAG,ATTACH TO OBJECT BY FORMING SLIP LUOP IN STRING	249	U	MIDTA03	23
TAG,ATTACH TO OBJECT WITH STRING(TAG PULLED THROUGH LOOP)	185	U	MIDTA02	23
TAG,ATTACH TO OBJECT WITH WIRE(LOOPED AND TWISTED)	317	U	MIDTA06	24
TAG,ATTACH WIRE	356	U	MIDTA07	24
TAG,REMOVE FROM OBJECT	VARIABLE	U	MIDTRXX	24
TAP(OR DIE),CUT ONE THREAD	VARIABLE	U	BTLTDXX	86
TAPE(ADHESIVE),ATTACH TO DESIRED POSITION	VARIABLE	U	MNFTAXX	54
TAPE(MASKING),REMOVE	191	U	MNFTK03	55
TAPE(PLASTIC),CUT PIECE FROM ROLL	VARIABLE	U	SNFTCXX	61
TAPE,ATTACH TO PART AND WRITE IDENTIFICATION ON TAPE	640	U	SIDTA01	25
TAPE,CUT TO OPEN BOX,TAPE ON TWO SIDES AND MIDDLE OF BOX TOP	TABLE	U	TPKTCXX	74
TAPE,CUT WITH KNIFE TO OPEN PACKAGE,BOX,ETC.	VARIABLE	U	BPKTCXX	71
TAPE,GET FROM DISPENSER,6 INCH LENGTH OF TAPE	65	U	MNFTG01	54
TAPE,REMOVE FROM OBJECT	97	U	MNFTR02	55
TAPE,REMOVE FROM ROLL	167	U	MNFTR01	55
TAPE,TEAR FROM LOOSE ROLL DISPENSER	VARIABLE	U	MNFTTXX	55
TERMINAL,MOUNT TO CHASIS	285	U	MWHTM01	113
TIME,OBSERVE	27	U	BELTO01	18
TOOL(ELECTRIC POWER),DISCONNECT AND WIND CORD AROUND TOOL	240	U	MTPTD01	105
TOOL(ELECTRIC POWER),UNWIND CORD AND CONNECT PLUG	216	U	XTPTU01	106
TOOL(TWO HANDLES),GET AND ASIDE	69	U	MTLTG01	91
TOOL,GET FROM AND RETURN TO TOOL DRAWER	VARIABLE	U	MJPTGXX	40
TOOL,INSTALL IN AND REMOVE FROM CHUCK OF PORTABLE DRILL MOTOR	486	U	STPTI01	106
TOOL,OBTAIN FROM OPEN TOOLBOX AND ASIDE TO TOTE BOX OR BENCH TOP	77	U	MTLTO01	92
TOOL,PLACE IN CHUCK AND TIGHTEN	190	U	MTPTP01	105
TOOL,REMOVE,FROM AND RETURN TO BELT KIT	132	U	MTLTR01	92
TOOL,REMOVE FROM CHUCK	120	U	MTPTR01	106
TOOL,START(DRILL OR SIMILAR WITH TRIGGER SWITCH)	22	U	MACTS01	4
TOOL,USE(ADDITIVE FOR INSTALLATION OR REMOVAL OF SELF LOCKING FASTENERS)	VARIABLE	U	BTLTUXX	86
TOOLBOX(MACHINIST),OPEN AND CLOSE	VARIABLE	U	MJPTOXX	40
TOOLBOX,OPEN AND CLOSE,STORAGE TYPE 2.5X5X1.5 FEET	195	U	MJPTO03	40

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTDP ELEMENT	PAGE
TOOLBOX,OPEN AND CLOSE LID	70	U	MJPT004	40
TOOLBOX,UNLOCK,OPEN,CLOSE,AND LOCK	158	U	MJPTU01	41
TORCH(PORTABLE PROPANE),ASSEMBLE/DISASSEMBLE	VARIABLE	U	SJPTAXX	43
TRIPOD(WITH VISE),SET UP TO USE OR TAKE DOWN AFTER USE,EFFECTIVE NET WEIGHT TO 30 POUNDS	VARIABLE	U	MVSTSXX	107
TRUCK(PICKUP),BOARD AND DISMOUNT BACK END	701	U	MBMTB01	7
TRUCK,MOUNT AND DISMOUNT	521	U	MEVTM01	19
TRUCK,START AND STOP	395	U	MEVTS01	19
TUBING,CUT WITH HAND HELD TUBE CUTTER,COPPER OR ALUMINUM TUBING 1/4-1/2 INCH DIAMETER	690	U	MTLTC01	91
TURNLOCK,FASTEN OR UNFASTEN(DZUS,CAMLOCK,ETC.)	VARIABLE	U	MNFTFXX	54
TURN WRIST,SHIFT GRASP AND TURN,WITH OR WITHOUT PRESSURE	VARIABLE	U	BELTSXX	18
TURN WRIST,TURN ONLY,WITH OR WITHOUT PRESSURE	VARIABLE	U	BELTWXX	18
VALVE(STEM TYPE),OPEN OR CLOSE WITH ONE HAND	VARIABLE	U	BACVSXX	2
VALVE,OPEN AND CLOSE	VARIABLE	U	MACVCXX	4
VALVE,OPEN OR CLOSE	VARIABLE	U	MACVOXX	4
VALVE,OPEN OR CLOSE	36	U	MACVO03	4
VALVE,PETCOCK,OPEN OR CLOSE	22	U	BACVP01	2
VEHICLE,TRAVEL	VARIABLE	U	BEVVTXX	19
VERTICAL CHANGE	VARIABLE	U	BBNVCXX	7
VISE(BENCH),OPEN AND CLOSE(1/4 INCH)	291	U	MVSVC01	107
VISE(QUICK ACTING),LOOSEN OR TIGHTEN	VARIABLE	U	MVSQAXX	107
VISE,ROTATE	VARIABLE	U	MVSRVXX	107
VISE,TIGHTEN AND LOOSEN WITH WRENCH	173	U	MVSVT01	107
VISE,TIGHTEN OR LOOSEN BY HAND		U	MVSTLXX	107
WALK,OBSTRUCTED,PER PACE	17	U	BBMWO01	7
WALK,UNOBSTRUCTED	VARIABLE	U	BBMWUXX	7
WASHER,ALIGN TO NUT BEFORE STARTING TO POSITION ON BOLT/SCREW	24	U	BTFWA01	80
WASHER,PLACE IN ALIGNMENT WITH NUT PRIOR TO STARTING NUT ON THREADS	62	U	MTFWP02	82
WASHER,PLACE ON BOLT OR SCREW	73	U	MTFWP01	82
WASHER,PLACE ON SCREW OR BOLT	VARIABLE	U	BTFWPXX	80
WEIGHT FACTOR,FIRST AND ADDITIONAL	TABLE	U	TELWFXX	19
WHEEL,JOG OR BUMP FOR FINAL SETTING	18	U	BACWJ01	2
WHEEL,MOVE RIM	TABLE	U	TACWMXX	5
WHEEL,POSITION TO SET DIAL OR POINTER	VARIABLE	U	BACWPXX	2
WHEEL,SHIFT GRASP AND TURN 1/3 REVOLUTION	TABLE	U	TACWSXX	6

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP-ATION	DWMSTDP ELEMENT	PAGE
WHEELBARROW,PICK UP HANDLES AND PUT DOWN	160	U	BMHWP01	47
WIRE(OR SOLDER),UNROLL FROM SPOOL,SIX INCH LENGTH	35	U	MWHWU01	114
WIRE(SAFETY),CUT OFF EXCESS AND BEND END OVER, TWISTED SINGLE STRAND TO .0625 INCH DIAMETER	94	U	MNFWC01	55
WIRE(SAFETY),INSERT THROUGH HOLE	VARIABLE	U	MNFWIXX	55
WIRE(SAFETY),INSTALL,TWO-STRAND TWISTED BETWEEN UNOBSTRUCTED ANCHORS,WIRE TO .0625 INCH DIAMETER	TABLE	U	TNFWIXX	60
WIRE(SAFETY),INSTALL USING SAFETY WIRE TWISTING PLIERS	VARIABLE	U	MNFISXX	50
WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED, FIRST STATION	270	U	MNFWR02	56
WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED ADDITIONAL STATION UP TO 6 INCHES APART	225	U	MNFWR03	56
WIRE(SAFETY),REMOVE FROM FIRST STATION,SINGLE STRAND	184	U	MNFWR01	56
WIRE(SAFETY),SECURE TO ANCHOR STATION WITH ONE TWIST BY HAND	VARIABLE	U	MNFWSXX	56
WIRE(SAFETY),TWIST BETWEEN ANCHORS WITH SAFETY WIRE PLIERS,WIRE TO .0625 INCH DIAMETER	VARIABLE	U	MNFWTXX	57
WIRE(SAFETY-CONTINUOUS),INSTALL	VARIABLE	U	SNFWIXX	61
WIRE(SAFETY-CONTINUOUS),REMOVE	VARIABLE	U	SNFWRXX	61
WIRE,ATTACH TO HOOK,SINGLE STRAND WIRE	167	U	MJPWA01	41
WIRE,ATTACH TO LARGE PART	83	U	MJPWA03	41
WIRE,ATTACH TO PART	110	U	MJPWA02	41
WIRE,BEND TO FORM LOOP USING PLIERS	46	U	BWHWB03	110
WIRE,BEND UP TO 120 DEGREES WITH HANDS	18	U	BWHWB04	110
WIRE,BEND WITH PLIERS	VARIABLE	U	BWHWRXX	109
WIRE,CUT WITH DIAGONAL PLIERS	86	U	MTLWC01	92
WIRE,DRESS INTO AN INSIDE CORNER	99	U	BWHWD01	110
WIRE,EXAMINE VISUALLY,SAFETY,TWISTED	VARIABLE	U	BITWEXX	29
WIRE,MEASURE FOR GAGE	185	U	MITWM01	32
WIRE,OBTAIN FROM ROLL AND STRAIGHTEN END	VARIABLE	U	MNFWOXX	56
WIRE,PLACE THROUGH HOLE IN OBJECT	41	U	MOHWP01	66
WIRE,ROUTE IN CHANNEL OR AGAINST FRAME	20	U	BWHWR01	110
WIRE,ROUTE PAST POST,PIN OR OBSTRUCTION	VARIABLE	U	BWHRWXX	109
WIRE,ROUTE THROUGH WIRES	VARIABLE	U	MWHWRXX	113
WIRE,STRAIGHTEN BY HAND	VARIABLE	U	BWHWSXX	110
WIRE,STRAIGHTEN WITH PLIERS	VARIABLE	U	BWHSWXX	109
WIRE,STRIP END	VARIABLE	U	MWHWSXX	113

OPERATION/ELEMENT DESCRIPTION	TMU VALUE	OCCUP- ATION	DWMSTOP ELEMENT	PAGE
WIRE,TIN LEAD END	76	U	MWHWTO1	113
WIRE,TWIST STRAND OF LEAD	32	U	BWHWTO3	111
WIRES-UNTWIST AFTER ROUTE THRU OPENING	54	U	BWHWUO1	111
WIRES,TWIST TO ROUTE THRU OPENING	VARIABLE	U	BWHWTXX	111
WORD(SEQUENCE),READ,PER WORD	5	U	BRDWSO1	76
WORD,READ,INDIVIDUAL WORD,ALPHA NUMERIC,OR NUMBER TO TRANSPOSE	7	U	BRDWIO1	76
WORDS,WRITE OR PRINT,SEQUENCE OF FIVE WORDS	VARIABLE	U	MWRWWXX	115
WRENCH(HEX NUT DRIVER),POSITION TO NUT,REMOVE	31	U	MTLWPO1	92
WRENCH(IMPACT),POSITION TO BOLT OR NUT	54	U	BTPWPO1	104
WRENCH(SPANNER),POSITION TO NUT AND REMOVE AFTER USE	39	U	BTLWPO1	87
WRENCH(STRAP),USE(ATTACH TO OBJECT)	VARIABLE	U	BTLWUXX	88
WRENCH(STRAP),USE(FINAL TIGHTEN OR INITIAL LOOSEN)	32	U	BTLWUO4	88
WRENCH(STRAP),USE,(MAKE ONE QUARTER TURN)	75	U	BTLWUO5	88
WRENCH(STRAP),USE,(REMOVE FROM OBJECT)	39	U	BTLWUO6	88
WRENCH(TORQUE),ADJUST INDICATOR	397	U	MTLWAO1	92
WRENCH,ADJUST,MONKEY OR CRESCENT	77	U	BTLWAO1	87
WRENCH,TORQUE,USE	VARIABLE	U	BTLWTXX	88
WRENCH,TURN PART(POWER WRENCH,FREE RUNNING)	VARIABLE	U	BTPWTXX	104
WRENCH,USE,BOX END,OPEN END,ALLEN WRENCH OR SIMILAR	TABLE	U	TTLWBXX	99

DEFENSE WORK MEASUREMENT STANDARD TIME DATA PROGRAM (DWMSTDP)

PART TWO - UNIVERSAL STANDARD TIME DATA

SECTION II - DWMSTDP ELEMENT LISTING

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DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFO	U	MAA	BACCE01	BACCE01	31	CRANK,ENGAGE ON SPLINES STARTS—WITH HANDS ON CRANK INCLUDES—ALL MOTIONS NECESSARY TO TURN CRANK TO ALIGN SPLINES AND PUSH CRANK ONTO SPLINES ENDS—WITH HANDS ON CRANK READY TO TURN
AE	U	MAW	FINFL01	BACFT01	36	FLASHLIGHT,TURN ON AND OFF STARTS—WITH FLASHLIGHT IN HAND INCLUDES—ALL MOTIONS NECESSARY TO TURN SWITCH ON,AIM FLASHLIGHT,AND TURN SWITCH OFF ENDS—WITH FLASHLIGHT IN HAND CONDITION—NO TIME FOR INSPECTION INCLUDED
FFO	U	MAA	BACKDXX	BACKDXX	VARIABLE	KNOB,DIAL SET OR ALIGN POINTER WITH TURN UP TO 180 DEGREES STARTS—WITH HAND ON DIAL KNOB INCLUDES—ALL MOTIONS NECESSARY TO TURN KNOB TO ALIGN POINTER,HAIRLINE,OR OTHER INDICATOR ENDS—WITH SETTING COMPLETED AND HAND ON KNOB
					13	CASE 01 SET DIAL TO LOOSE TOLERANCE—1/4 TO 1/16 INCH
					24	02 SET DIAL TO CLOSE TOLERANCE—1/16 TO 1/64 INCH
					50	03 SET DIAL TO EXACT TOLERANCE—1/64 INCH OR LESS

FFO	U	MAA	BACLS01	BACLS01	16	LEVER,SEAT TO MESH GEARS
						STARTS—WITH HAND ON LEVER AT END OF MOVE
						INCLUDES—MOVE AND APPLY PRESSURE TO LEVER TO
						    MESH GEARS
						ENDS—WITH HAND ON LEVER
						CONDITION—RESISTANCE 2.5 POUNDS OR LESS
						    EFFECTIVE NET WEIGHT

MAA	U	MAA	BACLU01	BACLU01	13	LEVER(NON—SQUEEZE),UNLATCH OR LATCH
						STARTS—WITH HAND ON LATCH
						INCLUDES—ALL MOTIONS NECESSARY TO UNLATCH OR
						    LATCH A NON—SQUEEZE TYPE LATCH FOR THE PURPOSE
						    OF DISENGAGING OR ENGAGING LEVER
						ENDS—WITH HAND ON LEVER

FFO	U	MAA	BACLD02	BACLU02	19	LEVER,UNLATCH TO DISENGAGE,SQUEEZE TYPE LATCH STARTS—WITH HAND ON LEVER INCLUDES—ALL MOTIONS NECESSARY TO RELEASE LATCH PREPARATORY TO MOVING LEVER ENDS—WITH HAND ON LEVER

AF	U	MAO	MAOC001	BACPD01	33	PEDAL,DEPRESS
						STARTS—WITH MOVE FOOT TO PEDAL
						INCLUDES—ALL MOTIONS NECESSARY TO UTILIZE
						    PRESSURE TO DEPRESS A PEDAL
						ENDS—WITH MOVEMENT OF THE FOOT AWAY FROM THE
						    PEDAL
						CONDITION—LEG MOTION TO NINE INCHES

MAA	U	MAA	BACSPXX	BACSPXX	VARIABLE	SWITCH,PUSH TO TURN ON OR OFF STARTS—WITH FINGER IN CONTACT WITH SWITCH INCLUDES—MOTIONS NECESSARY TO PUSH SWITCH TO TURN ON OR OFF ENDS—WITH FINGER IN CONTACT WITH SWITCH
					2	CASE 01 UP TO 1 INCH TRAVEL,TO 2.5 POUNDS RESISTANCE(NO PRESSURE)
					3	02 1—2 INCHES TRAVEL,TO 2.5 POUNDS RESISTANCE(NO PRESSURE)
					13	03 UP TO 2 INCHES TRAVEL,2.5—35 POUNDS RESISTANCE(WITH PRESSURE)

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	MAA	BACSTXX	BACSTXX	VARIABLF	SWITCH,TURN STARTS—WITH HAND OR FINGERS ON SWITCH INCLUDES—ALL MOTIONS NECESSARY TO TURN SWITCH ENDS—WITH HAND OR FINGERS ON SWITCH
					3	CASE 01 FINGER MOVE,TURN TO 180 DEGREES, RESISTANCE TO 2.5 POUNDS(NO PRESSURE)
					5	02 WRIST TURN TO 180 DEGREES,RESISTANCE TO 2.0 POUNDS(NO PRESSURE)
					19	03 WRIST TURN TO 180 DEGREES,RESISTANCE OVER 2.0 POUNDS(WITH PRESSURE)
FFD	U	MAA	BACVP01	BACVP01	22	VALVE,PETCOCK,OPEN OR CLOSE STARTS—WITH HAND ON VALVE INCLUDES—ALL MOTIONS NECESSARY TO OPEN OR CLOSE PETCOCK VALVE UP TO 180 DEGREES ENDS—WITH HAND ON VALVE CONDITION—APPLICABLE TO VALVE WITH RESISTANCE TO 35 POUNDS EFFECTIVE NET WEIGHT
FFD	U	MAA	BACVSXX	BACVSXX	VARIABLE	VALVE(STEM TYPE),OPEN OR CLOSE WITH ONE HAND STARTS—WITH HAND ON VALVE KNOB INCLUDES—ALL MOTIONS NECESSARY TO TURN VALVE ONE REVOLUTION ENDS—WITH HAND ON KNOB CONDITION—KNOB DIAMETER 4 INCHES OR LESS
					62	CASE 01 CLOSE VALVE ONE REVOLUTION AND FINAL TIGHTEN
					53	02 LOOSEN VALVE AND TURN FIRST REVOLUTION OR TURN ADDITIONAL REVOLUTION TO OPEN OR CLOSE
FFD	U	MAA	BACWJ01	BACWJ01	18	WHEEL,JOG OR BUMP FOR FINAL SETTING STARTS—WITH BOTH HANDS ON WHEEL INCLUDES—ALL MOTIONS NECESSARY TO REACH BACK AND STRIKE OTHER HAND ON WHEEL OR CRANK HANDLE ONCE ENDS—WITH HANDS ON WHEEL
FFD	U	MAA	BACWPXX	BACWPXX	VARIABLE	WHEEL,POSITION TO SET DIAL OR POINTER STARTS—WITH HAND ON WHEEL INCLUDES—ALL MOTIONS NECESSARY TO REGRASP WHEEL AND MOVE TO ADJUST DIAL OR POINTER ENDS—WITH HANDS ON WHEEL CONDITIONS—APPLIES TO WHEELS GRASPED ON RIM WITH BOTH HANDS—TIME ALLOWED FOR MOVES OF LESS THAN 1 INCH
					13	CASE 01 POSITION DIAL TO LOOSE TOLERANCE 1/4 TO 1/16 INCH
					24	02 POSITION DIAL TO CLOSE TOLERANCE 1/16 TO 1/64 INCH
					46	03 POSITION DIAL TO EXACT TOLERANCE 1/64 INCH OR LESS
NF	U	MAF	3909	MACBD01	45	BUTTON,DEPRESS(DOORBELL OR SIMILAR) STARTS—WITH REACH TO BUTTON INCLUDES—ALL THE MOTIONS NECESSARY TO CONTACT BUTTON AND DEPRESS BUTTON TWICE ENDS—WITH RELEASE OF BUTTON
NF	U	MAF	1231	MACC001	70	CONTROL(FOOT),OPERATE WITH PRESSURE STARTS—WITH FOOT AT REST INCLUDES—ALL MOTIONS NECESSARY TO MOVE FOOT TO CONTROL,APPLY PRESSURE AFTER INITIAL MOVEMENT OF CONTROL,RELEASE CONTROL,AND MOVE FOOT ASIDE ENDS—WITH FOOT AT REST

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	KERKSAX	MACCSXX	VARIABLE	CONTROLS,SET STARTS—WITH REACH TO CONTROL KNOB OR SWITCH INCLUDES—ALL THE MOTIONS NECESSARY TO REACH AND GRASP CONTROL,ADJUST OR SET TO DESIRED POSITIONS,RELEASE CONTROL ENDS—WITH RELEASE CONTROL IN REQUIRED POSITION CONDITIONS—APPLIES TO CONTROL KNOB,TOGGLE LEVER,OR BUTTON SWITCHES.REACH TO SWITCH APPROXIMATELY 18 INCHES.
					23	CASE 01 SWITCH,UP TO ONE INCH MOVE,NO PRESSURE REQUIRED
					36	02 SWITCH,UP TO ONE INCH MOVE,PRESSURE REQUIRED
					36	03 TURN KNOB,WRIST,UP TO 90 DEGREES, PRESSURE REQUIRED,LOOSE POSITION
					34	04 TURN KNOB,UP TO 180 DEGREES,NO PRESSURE REQUIRED,LOOSE POSITION
					45	05 TURN KNOB,UP TO 180 DEGREES,NO PRESSURE REQUIRED,CLOSE POSITION
					71	06 TURN KNOB,UP TO 180 DEGREES,NO PRESSURE REQUIRED,EXACT POSITION
FFD	U	MAA	KERKSB8	MACKU01	74	KNOB(CONTROL),UNLOCK AND LOCK STARTS—WITH REACH TO LOCK INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP AND LOOSEN LOCK,OPEN LOCK AND RELEASE,REACH TO LOCK,GRASP AND CLOSE LOCK,TIGHTEN LOCK ENDS—WITH RELEASE OF LOCK
NF	U	MAF	3527	MACLE01	37	LEVER,ENGAGE,OR DISENGAGE STARTS—WITH REACH TO LEVER INCLUDES—APPLY PRESSURE AND MOVE LEVER UP TO NINE INCHES ENDS—WITH RELEASE OF LEVER
NF	U	MAF	1137	MACLT01	102	LEVER,TURN ON AND OFF(AIR VALVE OR SIMILAR) STARTS—WITH REACH TO LEVER INCLUDES—ALL THE MOTIONS NECESSARY TO REACH, GRASP AND TURN LEVER TO TURN ON AND OFF ENDS—WITH RELEASE OF LEVER
MAA	U	MAA	MTLSSXX	MACMS01	104	MACHINE,START AND STOP WITH PUSH BUTTON OR ROTARY SWITCH STARTS—WITH REACH TO SWITCH INCLUDES—PUSH OR TURN SWITCH,HESITATION TO ASCERTAIN POWER IS ON,REACH TO SWITCH,PUSH OR TURN SWITCH ENDS—WITH HESITATION TO ASCERTAIN POWER IS OFF
NF	U	MAF	2382	MACMS02	34	MACHINE,START OR STOP(PUSH TYPE SWITCH) STARTS—WITH A REACH TO BUTTON INCLUDES—ALL THE MOTIONS NECESSARY TO REACH TO SWITCH,PUSH TO TURN ON OR OFF AND REACH TO BALANCE ENDS—WITH REACH TO BALANCE CONDITION—NO PRESSURE REQUIRED
OL	U	MAL	BELE	MACSOXX	VARIABLE	SWITCHES,OPERATE,CONTROL PANEL STARTS—WITH A REACH TO THE FIRST SWITCH INCLUDES—ALL INTERMEDIATE REACHES AND SWITCH ACTIVATIONS ENDS—WITH A REACHING AWAY FROM THE CONTROL PANEL TO THE READY POSITION CONDITIONS—TOGGLE,BUTTON OR KEY TYPE SWITCHES
					49	CASE 01 REACH TO FIRST SWITCH ON CONTROL PANEL AND REACH TO READY POSITION
					13	02 REACH TO ADDITIONAL SWITCH ON CONTROL PANEL
					3	03 ACTIVATE TOGGLE SWITCH
					2	04 ACTIVATE BUTTON SWITCH
					7	05 ACTIVATE KEY SWITCH

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	2394	MACTS01	22	TOOL,START(DRILL OR SIMILAR WITH TRIGGER SWITCH) STARTS—WITH A REACH TO SWITCH INCLUDES—ALL THE MOTIONS NECESSARY TO ACTUATE THE SWITCH ON AN ELECTRIC DRILL ENDS—WITH RELEASE OF SWITCH
MAA	U	MAA	OACVOXX	MACVCXX	VARIABLE	VALVE,OPEN AND CLOSE STARTS—WITH REACH TO VALVE INCLUDES—TURNING WHEEL OR LEVER ENDS—WITH VALVE OPEN OR CLOSED AND RELEASED CONDITIONS—AVERAGE NUMBER OF TURNS REQUIRED TO OPEN OR CLOSE VALVE COMPLETELY IS 5.31. RESISTANCE TO TURN VALVE AVERAGES FROM APPROXIMATELY A FRACTION OF A POUND TO TWO POUNDS. VALVE STEM HANDLE IS IN RANGE OF 1 1/2 TO 3 INCHES DIAMETER OR 1 1/2 TO 4 INCH LENGTH BAR HANDLE
					75	CASE 01 LEVER TYPE VALVE OR PETCOCK—TURNED NOT IN EXCESS OF 180 DEGREES
					581	02 GLOBE TYPE VALVE—TURN NOT IN EXCESS OF SEVEN TURNS
					330	03 GLOBE TYPE VALVE—SPIN NOT IN EXCESS OF SEVEN TURNS
NF	U	MAF	2089	MACVOXX	VARIABLE	VALVE,OPEN OR CLOSE STARTS—WITH TURN TO STEP TO VALVE INCLUDES—ALL MOTIONS NECESSARY TO WALK ONE PACE, BEND, GET VALVE HANDLE,OPEN OR CLOSE,AND ARISE ENDS—WITH OPERATOR STANDING ERECT
					315	CASE 01 SMALL VALVE,OPEN OR CLOSE W/ONE HAND
					531	02 LARGE VALVE,OPEN OR CLOSE W/TWO HANDS
NF	U	MAF	2404	MACVO03	36	VALVE,OPEN OR CLOSE STARTS—WITH REACH TO VALVE HANDLE INCLUDES—ALL MOTIONS NECESSARY TO OPEN OR CLOSE A VALVE SUCH AS A WATER FAUCET ENDS WITH RELEASE OF VALVE CONDITION—VALVE TURNED NOT MORE THAN 180 DEGREES
FFD	U	MAA	BACCCXX	TACCCXX	TABLE	CRANK,WITH CRANKING MOTIONS STARTS—WITH HAND ON CRANK INCLUDES—ALL MOTIONS NECESSARY TO TURN CRANK OR WHEEL WITH HANDLE ONE REVOLUTION UTILIZING CRANKING MOTIONS ENDS—WITH HAND ON CRANK

		CRANK DIAMETER (INCHES)		
		1-3 A	3-12 B	12-19 C
FIRST REVOLUTION,2.5 POUNDS OR LESS RESISTANCE	A	15	19	21
ADDITIONAL REVOLUTION, 2.5 POUNDS OR LESS RESISTANCE	B	10	14	16
PER REVOLUTION,2.5-17 POUNDS RESISTANCE (EFFECTIVE NET WEIGHT)	C	26	30	33

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFO	U	MAA	BACCMXX	TACCMXX	TABLE	CRANK, MOVE MOTIONS

STARTS—WITH HAND ON CRANK
INCLUDES—ALL MOTIONS NECESSARY TO TURN CRANK
OR WHEEL WITH HANDLE UTILIZING MOVE MOTIONS
ENDS—WITH HAND ON CRANK

	CRANK DIAMETER, INCHES			
	1-3	3-9	9-15	15-20
	A	B	C	D
FIRST REVOLUTION, 2.5 POUNDS OR LESS RESISTANCE	A 8	18	34	49
ADDITIONAL REVOLUTION, 2.5 POUNDS OR LESS RESISTANCE	B 2	13	30	46
FIRST REVOLUTION, 2.5- 17.5 POUNDS RESISTANCE (EFFECTIVE NET WEIGHT)	C 13	24	41	58

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAN	STECRXX	TACCTXX	TABLE	CRANK, TURN WITH CRANKING MOTION AND ALIGN

STARTS—WITH REACH TO CRANK
INCLUDES—ALL MOTIONS NECESSARY TO TURN CRANK
WITH CRANKING MOTION AND TO ALIGN TO SET TO A
MARK, METER READING, ETC.
ENDS—WITH RELEASE OF CRANK

		DEGREE OF ALIGNMENT				
		LOOSE		CLOSE		EXACT
		DIAMETER OF CRANK(INCHES)				
NO.		2	3	2	3	2	3
REV.		A	B	C	D	E	F
1	A	43	43	56	57	66	67
2	B	52	54	71	73	81	83
3	C	62	65	86	89	96	98
4	D	72	75	101	104	111	114
5	E	81	86	116	120	126	130
6	F	91	96	131	136	140	146
7	G	101	107	145	152	155	162
8	H	110	118	160	168	170	177
9	J	120	128	175	183	185	193
10	K	130	139	190	199	200	209

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	BACLMXX	TACLMXX	TABLE	LEVER, MOVE

STARTS—WITH HAND ON LEVER
INCLUDES—MOTIONS NECESSARY TO MOVE LEVER
ENDS—WITH HAND ON LEVER

		RESISTANCE(POUNDS)	
DISTANCE LEVER MOVED(INCHES)		TO 2.5 A	2.5-35 B
1-3	A	4	14
3-9	B	8	19
9-15	C	13	24
15-21	D	18	28

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	BACWMXX	TACWMXX	TABLE	WHEEL, MOVE RIM

STARTS—WITH HANDS ON RIM
INCLUDES—ALL MOTIONS NECESSARY TO MOVE RIM OF
WHEEL WITH OR WITHOUT PRESSURE
ENDS—WITH HANDS ON RIM

		RESISTANCE(POUNDS)	
DISTANCE RIM MOVED(INCHES)		TO 5 A	5-35 B
1-3	A	4	14
3-9	B	8	19
9-15	C	13	24
15-21	D	18	28

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	BACWSXX	TACWSXX	TABLE	WHEEL,SHIFT GRASP AND TURN 1/3 REVOLUTION STARTS—WITH HANDS ON RIM OF WHEEL INCLUDES—ALL MOTIONS NECESSARY TO SHIFT THE GRASP ON RIM AND TURN WHEEL 1/3 REVOLUTION ENDS—WITH HANDS ON THE WHEEL CONDITION—TO BE USED FOR ADDITIONAL MOVES ONLY.FOR FIRST MOVE USE TAC—WM—XX.

DISTANCE RIM MOVED(INCHES)		RESISTANCE(POUNDS) TO 5 A	5—35 B
1—3	A	12	16
3—9	B	19	24
9—15	C	27	32
15—21	D	34	40

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAM	BBMVH21	BBMBM01	83	BODY,MOVE SIDEWAYS TO NEW LOCATION WHILE SEATED STARTS—MOVEMENT OF FOOT TO ONE SIDE INCLUDES—ALL MOTIONS NECESSARY TO CONTACT SEAT WITH HAND(S),RAISE BODY FROM SEAT,SHIFT TO ONE SIDE,LOWER BODY TO SEAT,AND REPOSITION OTHER FOOT AND LEG. ENDS—WITH RELEASE(CONTACT)OF SEAT WITH HAND(S)
FFF	U	MAA	BBMFM01	BBMFM01	9	FOOT,MOVE SIDEWAYS OR VERTICALLY,NO PRESSURE APPLIED STARTS—WITH VERTICAL OR SIDEWAYS MOTION OF THE FOOT INCLUDES—ROTATING THE BALL OF THE FOOT ABOUT EITHER THE HEEL OR INSTEP WHERE THE PREDOMINANT PURPOSE IS TO RELOCATE THE FOOT OR THE OBJECT CONTACTED BY THE FOOT ENDS—WHEN MOVEMENT CEASES CONDITION—WHEN APPLICATION OF PRESSURE OCCURS ADD BEL—AP—02
FFF	U	MAA	BBMHC01	BBMHC01	19	HORIZONTAL CHANGE(SIDESTEP OR TURN BODY) STARTS—WITH MOVEMENT OF ONE LEG AND FOOT INCLUDES—DISPLACEMENT OF THE TRUNK LATERALLY WITHOUT ROTATION(SIDESTEP),OR ROTATING THE TRUNK WITH ONLY MINOR LATERAL DISPLACEMENT BY MOVEMENT OF ONE LEG AND FOOT ENDS—WHEN FOOT AND LEG HAVE BEEN PLACED AND HAVE ASSUMED THEIR PORTION OF THE BODY WEIGHT CONDITION—LIMITED TO TURN BODY 90 DEGREES OR SIDESTEP 15 INCHES.ENSUING MOTION STARTS WHEN LEADING FOOT CONTACTS SURFACE.WHEN LAGGING FOOT MUST CONTACT SURFACE BEFORE ENSUING MOTION,USE BBM—HC—01 TIMES TWO.
FFF	U	MAA	BBMLMXX	BBMLMXX	VARIABLE	LEG,MOVE,TO 21 INCHES STARTS—WITH MOVEMENT OF THE LEG INCLUDES—PLACEMENT OF THE FOOT AND/OR LEG IN ANY DIRECTION BY PIVOTING THE LEG AT THE KNEE AND/OR HIP WHEN THE PREDOMINANT PURPOSE IS TO MOVE THE LEG OR FOOT RATHER THAN THE BODY ENDS—WHEN MOVEMENT CEASES
					7	CASE 06 LEG MOTION 3—9 INCHES
					14	12 LEG MOTION 9—15 INCHES
					22	18 LEG MOTION 15—21 INCHES
FFF	U	MAA	BBMSSXX	BBMSSXX	VARIABLE	SIT AND STAND STARTS—WITH THE BODY IN FRONT OF THE SEAT INCLUDES—MOTIONS REQUIRED TO LOWER THE BODY TO A SEAT AND TO ARISE FROM THE SEAT ENDS—WHEN THE BODY HAS ASSUMED A STANDING POSITION
					108	CASE 01 SIT AND STAND,CHAIR STATIONARY
					172	02 SIT AND STAND,CHAIR MOVED

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	BBMVCXX	BBMVCXX	VARIABLE	VERTICAL CHANGE STARTS—WITH BODY PREPOSITIONED FOR LOWERING TRUNK INCLUDES—BODY MOTIONS FOR LOWERING AND RAISING TRUNK ENDS—WHEN BODY HAS ASSUMED AN ERECT STANCE
					61	CASE 01 BEND,STOOP,OR KNEEL ON ONE KNEE;AND ARISE
					146	02 KNEEL ON BOTH KNEES AND ARISE
FFF	U	MAA	BBMW001	BBMW001	17	WALK,OBSTRUCTED,PER PACE STARTS—WITH MOTION OF THE FOOT AND LEG INCLUDES—EMPLOYING THE FEET AND LEGS ALTERNATELY TO DISPLACE THE TRUNK FORWARD OR BACKWARD BY ONE STEP UNDER OBSTRUCTED CONDITIONS ENDS—WHEN THE FOOT HAS CONTACTED THE GROUND AND REASSUMED ITS PORTION OF THE WEIGHT
MAA	U	MAA	BBMWUXX	BBMWUXX	VARIABLE	WALK,UNOBSTRUCTED STARTS—WITH MOVEMENT OF FOOT AND LEG INCLUDES—EMPLOYING THE FEET AND LEGS ALTERNATELY TO DISPLACE THE TRUNK FORWARD OR BACKWARD UNDER UNOBSTRUCTED CONDITIONS ENDS—WHEN THE FOOT HAS TOUCHED THE GROUND AND REASSUMED ITS PORTION OF THE BODY WEIGHT
					15	CASE 01 WALK ONE PACE
					53	02 WALK TEN FEET
DL	U	EUL	BMBA	MBMAB01	596	AIRCRAFT,BOARD AND DISMOUNT STARTS—WITH LIFTING THE LEG TO THE FIRST RUNG INCLUDES—ALL THE TIME NECESSARY TO CLIMB SEVEN STEPS INTO AND OUT OF AN AIRCRAFT ENDS—WITH BOTH FEET ON GROUND AFTER CLIMBING DOWN LADDER
NF	U	MAF	371	MBMCLXX	VARIABLE	LADDER(EXTENSION),CLIMB AND DESCEND STARTS—WITH REACH TO LADDER INCLUDES—ALL MOTIONS NECESSARY TO NEGOTIATE ONE RUNG OF A LADDER UP AND DOWN ENDS—WITH RELEASE OF LADDER CONDITION—HANDS MUST BE FREE TO GRASP LADDER. APPLICABLE TO EXTENSION OR OTHER LEAN TYPE LADDERS
					122	CASE 01 FIRST RUNG
					67	02 EACH ADDITIONAL RUNG
FFD	U	MAA	MBMLCXX	MBMLCXX	VARIABLE	LADDER(VERTICAL),CLIMB UP AND DOWN ONE RUNG OR STEP STARTS—WITH PERSON READY TO CLIMB INCLUDES—ALL MOTIONS NECESSARY TO NEGOTIATE ONE RUNG OF A LADDER UP AND DOWN ENDS—WHEN NEGOTIATION OF ONE RUNG OR MOUNT/ DISMOUNT IS COMPLETED CONDITION—APPLIES TO VERTICAL TYPE LADDER
					401	CASE 01 CLIMB ONE RUNG,DISMOUNT/MOUNT AT TOP/ BOTTOM,MOUNT/DISMOUNT,CLIMB ONE RUNG
					149	02 CLIMB EACH ADDITIONAL RUNG
DL	U	EUL	BMBL	MBMTB01	701	TRUCK(PICKUP),BOARD AND DISMOUNT BACK END STARTS—WITH REACH TO TAILGATE INCLUDES—ALL THE TIME NECESSARY TO BOARD,TAKE A SEAT IN THE BACK OF THE TRUCK AND LEAVE THE TRUCK ENDS—WITH BOTH FEET ON GROUND READY TO WALK

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	MBMXXXX	TBMPCXX	TABLE	POSITION,CHANGE

POSITION,CHANGE
   STARTS—WITH FIRST MOVEMENT OF BODY MEMBER
   INCLUDES—ALL MOTIONS NECESSARY TO SIDESTEP AND
      WALK;TURN AND WALK;OR ARISE,TURN,AND WALK
   ENDS—WITH LAST PACE OF WALKING OR LAST MOTION
      OF BODY MEMBER
   CONDITIONS—OBSTRUCTED WALKING ONLY
      REFERENCE—ROW A,HORIZONTAL CHANGE(HC),INCLUDES
      TURN BODY OR SIDESTEP AND WALK
      ROW B,HORIZONTAL/VERTICAL CHANGE(HV),INCLUDES
      TURN BODY OR SIDESTEP;WALK;AND STOOP,BEND, OR
      KNEEL
      ROW C,VERTICAL CHANGE(VC),INCLUDES ARISE;TURN
      BODY OR SIDESTEP;WALK;AND STOOP,BEND,OR KNEEL

PACES WALKED

		0	1	2	3	4	5	6	7
		A	B	C	D	E	F	G	H
HC	A	19	36	53	70	87	104	121	138
HV	B	50	67	84	101	118	135	152	169
VC	C	80	97	114	131	148	165	182	199

		8	9	10	12	14	16	18	20
		I	J	K	L	M	N	O	P
HC	A	155	172	189	223	257	291	325	359
HV	B	186	203	220	254	288	322	356	390
VC	C	216	233	250	284	318	352	386	420

		22	24	26	28	30	32	34	36
		Q	R	S	T	U	V	W	Y
HC	A	393	427	461	495	529	563	597	631
HV	B	424	458	492	526	560	594	628	662
VC	C	454	488	522	556	590	624	658	692

		38	40	42	44	46	48	50	52
		Z	1	2	3	4	5	6	7
HC	A	665	699	733	767	801	835	869	903
HV	B	696	730	764	798	832	866	900	934
VC	C	726	760	794	828	862	896	930	964

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAN	FINVA01	BCLOC01	61	DIAL,CLEAN WITH CLOTH

DIAL,CLEAN WITH CLOTH
   STARTS—WITH CLOTH IN HAND
   INCLUDES—ALL MOTIONS NECESSARY TO MOVE CLOTH
      TO DIAL,WIPE DIAL,AND MOVE CLOTH AWAY
   ENDS—WITH CLOTH IN HAND
   CONDITION—APPLICABLE TO WIPING SMALL DIALS,
      GAUGES,OR SIMILAR WITH DIAMETER OF FOUR INCHES
      OR LESS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	J	MAN	FINEAD1	BCLDW01	45	DIPSTICK,WIPE WITH CLOTH

DIPSTICK,WIPE WITH CLOTH
   STARTS—WITH CLOTH IN ONE HAND AND DIPSTICK IN
      OTHER HAND
   INCLUDES—ALL MOTIONS NECESSARY TO GET DIPSTICK
      TO CLOTH,GRASP DIPSTICK WITH CLOTH,AND PULL
      THROUGH
   ENDS—WITH MOVE CLOTH AWAY FROM DIPSTICK

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	3213	BCLPCXX	VARIABLE	PART,CLEAN WITH RAG STARTS-WITH MOVE RAG TO PART INCLUDES-ALL THE MOTIONS NECESSARY TO WIPE AND CLEAN A PART ENDS-WITH MOVE RAG AWAY CONDITIONS-SMALL PART-METAL OR NON-METAL PART WITH WEIGHT TO THREE POUNDS AND AREA TO TWO SQUARE FEET MEDIUM PART-METAL OR NON-METAL PART WITH WEIGHT 3-40 POUNDS AND AREA TWO-SIX SQUARE FEET LARGE PART-METAL OR NON-METAL PART WITH WEIGHT 40-100 POUNDS AND AREA 6-10 SQUARE FEET
					258 487 103 80	CASE 01 SMALL PART ON BENCH 02 MEDIUM PART ON BENCH 03 LARGE PART ON FLOOR-FIRST SQUARE FOOT 04 LARGE PART ON FLOOR-EACH ADDITIONAL SQUARE FOOT
NF	U	MAF	1135	BCLSCXX		SURFACE,CLEAN WITH SCRAPER STARTS-WITH APPLY PRESSURE TO SCRAPER INCLUDES-ALL THE MOTIONS NECESSARY TO SCRAPE ONE SQUARE FOOT OF SURFACE ENDS-WITH ONE SQUARE FOOT SCRAPED CONDITION-APPLICABLE TO USE OF FLAT SCRAPER FOR REMOVAL OF HEAVY DIRT OR GREASE OR LIGHT CORROSION,RUST,OR SCALE
					449 898 732 1171	CASE 01 SMOOTH SURFACE-UNOBSTRUCTED 02 SMOOTH SURFACE-OBSTRUCTED 03 ROUGH SURFACE-UNOBSTRUCTED 04 ROUGH SURFACE-OBSTRUCTED
NF	U	MAF	1134	BCLSC05	476	SURFACE,CLEAN WITH WIRE BRUSH STARTS-WITH APPLY PRESSURE TO BRUSH INCLUDES-ALL THE MOTIONS NECESSARY TO BRUSH ONE SQUARE FOOT OF SURFACE ENDS-WITH ONE SQUARE FOOT BRUSHED
NF	U	MAF	1138	BCLSC04	160	SURFACE,CLEAN WITH AIR STARTS-WITH AIR ON AND HOSE IN HAND INCLUDES-ALL THE MOTIONS NECESSARY TO BLOW DIRT OFF OF ONE SQUARE FOOT OF SURFACE ENDS-WITH ONE SQUARE FOOT CLEANED
FFE	U	MAA	GCLCAXX	MCLACXX	VARIABLE	AREA,CLEAN WITH AIR,TO NINE SQUARE INCHES STARTS-WITH NOZZLE IN HAND INCLUDES-ALL MOTIONS NECESSARY TO PLACE NOZZLE TO SPOT TO BE CLEANED,ACTUATE TRIGGER,CLEAN TO NINE SQUARE INCHES,RELEASE TRIGGER,AND MOVE NOZZLE ASIDE ENDS-WITH NOZZLE IN HAND
					59 26	CASE 01 FIRST OR SINGLE SPOT TO NINE SQUARE INCHES 02 ADDITIONAL SPOT TO NINE SQUARE INCHES NOT TO EXCEED NINE INCHES APART
FFE	U	MAA	GCLCSA1	MCLBC01	194	BRUSH,CLEAN IN SOLVENT,SMALL BRUSH STARTS-WITH GET BRUSH INCLUDES-ALL MOTIONS NECESSARY TO PLACE BRUSH IN OPEN JAR OF SOLVENT,MOVE BRUSH IN SOLVENT TO CLEAN,GET CLOTH,PLACE BRUSH TO CLOTH,PULL BRUSH THROUGH CLOTH TO CLEAN AND DRY,AND ASIDE CLOTH ENDS-WITH ASIDE BRUSH CONDITIONS-APPLICABLE TO SMALL BRUSH LESS THAN 3/16 INCH IN DIAMETER

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
AF	U	MAA	562	MCLCS01	351	COMPOUND(SEAL),SCRAPE OFF STARTS—WITH PART AND TOOL IN HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE TOOL TO PART,MAKE 20 STROKES WITH PRESSURE ON SURFACE TO BE SCRAPED ENDS—WITH COMPLETION OF LAST STROKE CONDITIONS—SCRAPE FLAT CIRCULAR SURFACE 1/2 INCH WIDE AND TWO INCHES IN DIAMETER
FFD	U	MAA	GECCH05	MCLHC01	420	HANDS,CLEAN BY DIPPING IN FLUID CLEANER STARTS—WITH REACH HANDS TO CLEANER(SIMO) INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE HANDS INTO CLEANER,MOVE HANDS TOGETHER TO CLEAN,REMOVE HANDS FROM CLEANER AND GET TOWEL, WIPE HANDS WITH TOWEL,ASIDE TOWEL ENDS—WITH ASIDE TOWEL
FFE	U	MAA	GCLCH81	MCLHW01	271	HANDS,WIPE WITH CLOTH OR PAPER TOWEL STARTS—WITH REACH TO TOWEL INCLUDES—ALL THE MOTIONS NECESSARY TO WIPE BOTH HANDS CLEAN ENDS—WITH ASIDE TOWEL
NF	U	MAF	3195	MCLHW02	160	HAND,WIPE WITH CLOTH OR PAPER TOWEL STARTS—WITH REACH TO CLOTH OR TOWEL INCLUDES—ALL MOTIONS NECESSARY TO GET TOWEL WITH ONE HAND,MOVE TO OTHER HAND,WIPE ONE HAND,AND LAY CLOTH OR TOWEL ASIDE ENDS—WITH RELEASE OF CLOTH OR TOWEL
FFE	U	MAA	GTLSKA1	MCLIC01	44	IRON(SOLDERING),CLEAN BY SHAKING STARTS—WITH IRON IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO LIFT IRON AND SHAKE TO REMOVE EXCESS SOLDER AND/OR DIRT FROM TIP ENDS—WITH IRON RETURNED TO STARTING POSITION
NF	U	MAF	343	MCLOCXX	VARIABLE	OBJECT,CLEAN WITH BRUSH,PER SQUARE FOOT STARTS—WITH REACH TO BRUSH INCLUDES—ALL MOTIONS NECESSARY TO GET BRUSH, MOVE TO WORK AREA,MAKE ONE FORWARD AND ONE RETURN STROKE ACROSS AREA TO BE CLEANED,AND RETURN BRUSH TO SHELF ENDS—WITH RELEASE OF BRUSH CONDITION—REMOVAL OF LOOSE MATERIAL FROM TABLE OR SIMILAR
					81	CASE 01 FIRST SQUARE FOOT
					43	02 EACH ADDITIONAL SQUARE FOOT
NO	U	MAL	D1A	MCLOC03	88	OBJECT,CLEAN WITH BRUSH AND SOLVENT STARTS—WITH REACH TO GET OBJECT AND BRUSH INCLUDES—ALL THE MOTIONS NECESSARY TO GET OBJECT AND BRUSH,HOLD OBJECT,DIP BRUSH INTO SOLVENT,BRUSH OBJECT TO CLEAN AND ASIDE BRUSH AND OBJECT ENDS—WITH ASIDE BRUSH AND OBJECT CONDITION—APPLICABLE TO SMALL HAND HELD OBJECTS
AF	U	OBW	XX846	MCLOWXX	VARIABLE	OBJECT,WASH STARTS—WITH MOVE OBJECT TO CAN INCLUDES—ALL THE MOTIONS NECESSARY TO DIP AN OBJECT IN A CAN OF FLUID,MOVE IN FLUID,REMOVE, DRAIN AND ASIDE ENDS—WITH ASIDE TO TOTE BOX CONDITION—MAKE SIX 90 DEGREE TURNS TO WASH
					82	CASE 01 OBJECT WEIGHS TO TWO POUNDS
					106	02 OBJECT WEIGHS 2-7 POUNDS
					131	03 OBJECT WEIGHS 7-13 POUNDS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
AF	U	OBW	221891	MCLPCXX	VARIABLE	PART,CLEAN WITH AIR
						STARTS—WITH REACH TO AIR HOSE WITH ONE HAND AND OTHER HAND ON PART
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET THE HOSE,MOVE HOSE TO PART,TURN ON AIR WITH PUSH BUTTON,ROTATE PART,TURN OFF AIR,RETURN HOSE
						ENDS—WITH ONE HAND AWAY FROM HOSE AND OTHER HAND ON PART
					162	CASE 01 FOUR INCH PART TO FIVE POUNDS
					279	02 EIGHT INCH PART 5-15 POUNDS
					370	03 12 INCH PART-15 TO 40 POUNDS
FFE	U	MAA	GCLCAB1	MCLSCXX	VARIABLE	SURFACE,CLEAN,WITH BRUSH,MEDIUM RESISTANCE
						STARTS—WITH REACH TO BRUSH
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET A BRUSH,PLACE BRUSH ON SURFACE,MOVE BRUSH TO CLEAN SURFACE AND ASIDE BRUSH
						ENDS—WITH ASIDE BRUSH
						CONDITIONS—TIME IS TO CLEAN ONE SQUARE FOOT OF SURFACE
					223	CASE 01 FIRST SQUARE FOOT
					180	02 EACH ADDITIONAL SQUARE FOOT
FFE	U	MAA	GCLCHA7	MCLSCO3	1584	SURFACE,CLEAN WITH SANDPAPER
						STARTS—WITH REACH TO GET SANDPAPER
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET AND PLACE SANDPAPER TO SURFACE AND SAND UP TO ONE SQUARE FOOT OR EACH ADDITIONAL SQUARE FOOT OF AREA
						ENDS—WITH SANDPAPER IN HAND READY TO CONTINUE OR ASIDE
						CONDITIONS—WET OR DRY SANDPAPER—USED FOR CLEANING,DRESSING OUT BLEMISHES OR PREPARING SURFACE FOR PAINT,ETC.—DOES NOT INCLUDE MOVING OR POSITIONING PART
AF	U	MAF	1259	MCLSCO4	334	SURFACE,CLEAN WITH WIRE BRUSH,EMERY CLOTH AND RAG—PER FOUR LINEAR INCHES
						STARTS—WITH REACH TO PICK UP BRUSH
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET A WIRE BRUSH,CLEAN A FOUR INCH SPOT,ASIDE BRUSH AND GET EMERY CLOTH OR PIECE OF STEEL WOOL, CLEAN SPOT,ASIDE EMERY CLOTH OR STEEL WOOL,GET RAG,WIPE SPOT CLEAN AND ASIDE RAG
						ENDS—WITH RELEASE OF RAG
FFE	U	MAA	GCLCWB1	MCLSSW1	VARIABLE	SURFACE,SCRAPE TO CLEAN
						STARTS—WITH REACH TO GET CLEANING IMPLEMENT
						INCLUDES—ALL THE MOTIONS NECESSARY TO CLEAN RUST OR CORROSION FROM A SURFACE BY HAND
						ENDS—WITH SURFACE CLEAN AND CLEANING IMPLEMENT IN HAND
						CONDITIONS—WIRE BRUSH,CROCUS CLOTH OR EMERY PAPER USED TO CLEAN
					251	CASE 01 CLEAN UP TO ONE SQUARE INCH
					551	02 CLEAN 1-4 SQUARE INCHES
					791	03 CLEAN 4-9 SQUARE INCHES
					1031	04 CLEAN 9-16 SQUARE INCHES
					1271	05 CLEAN 16-25 SQUARE INCHES
FFE	U	MAA	GCLWSA1	MCLSWXX	VARIABLE	SURFACE,WIPE WITH CLOTH
						STARTS—WITH REACH FOR CLOTH
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET AND PLACE CLOTH ON SURFACE AND CLEAN ONE SQUARE FOOT OF SURFACE
						ENDS—WITH CLOTH ASIDE
					127	CASE 01 FLAT SURFACE,FIRST SQUARE FOOT
					72	02 FLAT SURFACE,EACH ADDITIONAL SQUARE FOOT
					199	03 IRREGULAR SURFACE,FIRST SQUARE FOOT
					144	04 IRREGULAR SURFACE,EACH ADDITIONAL SQUARE FOOT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	BCLXXXX	TCLOCXX	TABLE	OBJECT,CLEAN,PER STROKE

OBJECT,CLEAN,PER STROKE
STARTS—WITH CLEANING DEVICE IN PLACE AND READY FOR USE
INCLUDES—ALL MOTIONS NECESSARY TO MAKE ONE STROKE WITH THE CLEANING DEVICE
ENDS—WITH LAST USE OF CLEANING DEVICE
CONDITIONS—APPLICABLE TO THE REMOVAL OF FOREIGN MATTER BY CHEMICAL OR MECHANICAL PROCESS. TIME VALUES FOR ROWS B,D,AND G INCLUDE APPLY PRESSURE AT THE BEGINNING OF THE STROKE. TIME FOR FORWARD AND RETURN STROKE INCLUDED. WIDTH OF AREA CLEANED DEPENDS ON THE WIDTH OF THE CLEANING DEVICE.

		DISTANCE PER 1-WAY STROKE(INCHES)					
		TO 1	1-3	3-9	9-15	15-21	21-27
		A	B	C	D	E	F
TO 2.5 LBS RESISTANCE							
WITHOUT PRESSURE	A	4	9	18	27	34	41
W/PRESS	B	15	20	28	37	45	52
2.5 TO 10 LBS RESISTANCE							
ONE WAY							
WITHOUT PRESSURE	C	6	12	21	30	37	45
W/PRESS	D	15	20	29	38	46	53
BOTH WAYS	E	8	14	23	33	40	48
10-20 LBS RESISTANCE							
ONE WAY							
WITHOUT PRESSURE	F	10	16	25	35	43	50
W/PRESS	G	15	21	30	40	48	55
BOTH WAYS	H	16	22	32	43	51	59

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	TCA	GECCHHX	TCLPCXX	TABLE	PART,CLEAN(BY HAND)WITH SOLVENT

PART,CLEAN(BY HAND)WITH SOLVENT
STARTS—WITH PART IN SOLVENT BOOTH,CLEANING INSTRUMENT IN HAND
INCLUDES—ALL THE MOTIONS NECESSARY TO WASH PART WITH A BRUSH,SPRAY WITH SOLVENT TO RINSE AND BLOW OFF WITH AIR TO DRY
ENDS—WITH CLEANING COMPLETE
CONDITIONS—DOES NOT INCLUDE GET/ASIDE BRUSH, SPRAY,AIR HOSE OR PART

OPERATION		SIZE OF PART		
		SMALL A	MEDIUM B	LARGE C
HAND WASH— WITH BRUSH	A	1223	1867	4034
SOLVENT SPRAY	B	237	608	673
BLOW OFF WITH AIR	C	373	605	1667

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OHMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFM	U	MAA	KERCLAX	SCLCRXX	VARIABLE	CORROSION,REMOVE FROM SPOT ON SURFACE

STARTS=WITH REACH TO GET WIRE BRUSH
INCLUDES=ALL THE MOTIONS NECESSARY TO GET WIRE
BRUSH AND SCRUB CORRODED SPOT TO REMOVE
CORROSION,ASIDE BRUSH,GET CONTAINER OF CLEAN-
ING COMPOUND,GET CLOTH,OPEN CONTAINER AND TILT
TO WET CLOTH,ASIDE CONTAINER,WIPE BRUSHED
SPOT WITH WET CLOTH,TURN CLOTH TO DRY SURFACE
AND WIPE WET AREA DRY,ASIDE CLOTH,GET CLEANER
CONTAINER AND REPLACE LID,ASIDE CAN
ENDS=WITH RELEASE OF CONTAINER
CONDITIONS=BRUSH FIRST SQUARE INCH WITH 120
STROKES,EACH ADDITIONAL SQUARE INCH WITH 43
STROKES.WIRE BRUSH TO 1/4 INCH WIDE/DIAMETER.

- 1765   CASE 01 BRUSH,WIPE WITH WET AND DRY CLOTH; FIRST OR ONLY SQUARE INCH;FLAT SURFACE
- 430   02 BRUSH ONLY;EACH ADDITIONAL SQUARE INCH;TIME IS INCLUDED IN CASE 01 TO WIPE AREA UP TO 12 INCHES LONG=FLAT SURFACE
- 3085   03 BRUSH,WIPE WITH WET AND DRY CLOTH; FIRST OR ONLY SQUARE INCH;ROUND OR IRREGULAR SURFACE
- 903   04 BRUSH ONLY;EACH ADDITIONAL SQUARE INCH;TIME IS INCLUDED IN CASE 03 TO WIPE AREA UP TO 12 INCHES LONG;ROUND OR IRREGULAR SURFACE

| FFM | U | MAA | KCLSPAX | SCLCSXX | VARIABLE | SPOT,CLEAN ON FLAT OR IRREGULAR SURFACE WITH PICK AND AIR |

STARTS=WITH REACH TO GET TOOL(PICK)
INCLUDES=ALL THE MOTIONS NECESSARY TO GET PICK
AND POSITION TO SPOT,CLEAN SPOT WITH PICK
(LIGHT RESISTANCE AND PRESSURE),AND ASIDE
TOOL,GET AIR NOZZLE,POSITION TO WORK AND
ACTUATE BUTTON,CLEAN SPOT WITH AIR,ASIDE
NOZZLE
ENDS=WITH ASIDE AIR NOZZLE
CONDITIONS=TOOL IS SIMILAR TO METAL PICK OR
SPADE POINTER END OF SOLDERING AID.MAXIMUM
DIAMETER OF SPOT IS 1/8 INCH.

- 209   CASE 01 FIRST OR ONLY SPOT
- 115   02 EACH ADDITIONAL SPOT

| MAA | U | MAA | JPAMRRF | SCLSCXX | VARIABLE | SURFACE,CLEAN WITH SOLVENT AND CLOTH |

STARTS=WITH REACH TO CAN AND LID
INCLUDES=ALL THE MOTIONS NECESSARY TO GET CAN
OF SOLVENT AND PRY OFF LID,ASIDE LID,GET RAG
AND DIP IN SOLVENT,WRING OUT RAG,MOVE RAG TO
AND SCRUB AREA,EXAMINE AREA FOR ADDITIONAL
REMOVAL,RETURN RAG,REPLACE LID ON CAN
ENDS=WITH LID ON CAN
CONDITIONS=APPLICABLE TO REMOVAL OF SUBSTANCES
SUCH AS MASKING TAPE RESIDUE OR SIMILAR FROM
AREA TO 2X12 INCHES

- 658   CASE 01 GET AND OPEN CAN OF SOLVENT,GET RAG PER OCCURENCE
- 109   02 DIP RAG IN SOLVENT,MOVE TO SURFACE AND RETURN TO SOLVENT,WRING RAG PER OCCURENCE
- 182   03 SCRUB AND EXAMINE SIMPLE SURFACE
- 225   04 SCRUB AND EXAMINE COMPLEX SURFACE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	SCLCC47	SCLSWXX	VARIABLE	SURFACE,WIPE WITH WET CLOTH STARTS—WITH REACH TO CLOTH IN BUCKET OF THINNER INCLUDES—ALL THE MOTIONS NECESSARY TO GET CLOTH FROM BUCKET OF THINNER,WRING OUT EXCESS THINNER,MOVE CLOTH TO SURFACE AND WIPE,ASIDE CLOTH ENDS—WITH ASIDE CLOTH CONDITIONS—THINNER IS MIL-TT-T-266,MIL-T-19544 OR SIMILAR.WIPE SURFACE THREE STROKES PER SQUARE FOOT
					183	CASE 01 WIPE FIRST OR ONLY SQUARE FOOT
					81	02 WIPE EACH ADDITIONAL SQUARE FOOT (THREE STROKES WITH CLOTH ONLY)
FFE	U	NAA	GCPCA05	MCPCI01	322	CLAMP(C TYPE),INSTALL AND REMOVE STARTS—WITH REACH TO GET CLAMP INCLUDES—ALL THE MOTIONS NECESSARY TO PLACE, TIGHTEN,LOOSEN AND REMOVE CLAMP FROM OBJECT ENDS—WITH CLAMP ASIDE CONDITIONS—WING OR T TYPE HANDLE—CLAMP WEIGHS 2.5 TO 10 POUNDS. CLAMP IS OPEN.
NF	U	NAF	3000	MCPCI02	46	CLAMP(SPRING),INSTALL STARTS—WITH REACH TO CLAMP INCLUDES—ALL THE MOTIONS NECESSARY TO GET AND INSTALL A SPRING CLAMP ON A PART ENDS—WITH RELEASE OF CLAMP
FFF	U	NAA	MCPCLXX	MCPCLXX	VARIABLE	CLAMP(CLECO),INSTALL OR REMOVE STARTS—WITH HAND ON PLIERS AND PLIERS WITHIN THREE INCHES OF CLAMP INCLUDES—ALL MOTIONS NECESSARY TO INSTALL OR REMOVE CLECO CLAMP WITH CLECO PLIERS ENDS—WITH RELEASE OF TENSION ON CLAMP
					55	CASE 01 REMOVE CLECO CLAMP
					82	06 INSTALL CLECO CLAMP WITH UP TO 15 INCH PLACE OF CLAMP
					92	18 INSTALL CLECO CLAMP WITH 15-27 INCH PLACE OF CLAMP
FFF	U	NAA	MCPCT01	MCPCT01	75	CLAMP(C TYPE),TIGHTEN OR LOOSEN STARTS—WITH HAND(S)ON CLAMP INCLUDES—ALL MOTIONS NECESSARY TO TIGHTEN OR LOOSEN A"C"CLAMP ENDS—WITH HAND(S)ON CLAMP CONDITIONS—UP TO 6-INCH T-HANDLE RADIUS,ONE REVOLUTION CLEARANCE BETWEEN PART AND CLAMP
FFF	U	NAA	MCPPJXX	MCPPJXX	VARIABLE	JAW(PARALELL),TIGHTEN OR LOOSEN STARTS—WITH ONE HAND ON ADJUSTING HANDLE AND OTHER HAND ON LOCKING HANDLE READY TO TURN INCLUDES—ALL MOTIONS NECESSARY TO TIGHTEN OR LOOSEN PARALELL JAW DOUBLE HANDLE SCREW CLAMP ENDS—WITH HANDS ON HANDLES AFTER TIGHTENING OR LOOSENING CONDITION—UP TO ONE THREAD ADJUSTMENT INCLUDED
					112	CASE 01 LARGE CLAMP,TIGHTEN OR LOOSEN (SCREWDRIVER HANDLES)
					50	02 SMALL CLAMP,TIGHTEN OR LOOSEN (KNURLED KNOBS TO 3/4 INCH O.D.)

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	MCPSPXX	MCPSPXX	VARIABLE	CLAMP(SPRING),INSTALL OR REMOVE,SMALL OR LARGE
						STARTS—WITH CLAMP IN HAND
						INCLUDES—ALL MOTIONS NECESSARY TO OPEN AND CLOSE CLAMP FOR INSTALLATION OR REMOVAL
						ENDS—WITH CLAMP IN HAND AFTER INSTALLATION OR REMOVAL
						CONDITIONS—DOES NOT INCLUDE MOVE TO INSTALLATION OR MOVE AWAY AFTER REMOVAL FROM PART. COMMON TO ALLIGATOR CLAMPS,HEAT SINKS, AND VISE GRIP TYPE CLAMPS
					20	CASE 01 SMALL CLAMP UP TO 1 INCH OF MOVEMENT
					26	02 LARGE CLAMP FROM 1-3 INCHES OF MOVEMENT
NAA	U	MAA	QCPHTXX	SCPCIXX	VARIABLE	CLAMP,INSTALL AND REMOVE
						STARTS—WITH REACH TO TOOL AND/OR CLAMP
						INCLUDES—ALL THE MOTIONS NECESSARY TO OBTAIN AND/OR ADJUST CLAMP AND INSTALL ON WORK AND LOOSEN AND REMOVE FROM WORK FOR FIRST CLAMP AND FOR EACH ADDITIONAL CLAMP USED
						ENDS—WITH CLAMP AND/OR TOOL ASIDE
						CONDITIONS—LIMITED TO ACCOMPLISHMENT CONTAIN-ING SOME INTERFERENCE BUT WHOLLY VISIBLE OR NO INTERFERENCE AND PARTIALLY VISIBLE
					388	CASE 01 CLECO,PLIER TYPE—FIRST PIECE
					230	02 CLECO,PLIERS TYPE—ADDITIONAL PIECE
					359	03 TOGGLE(QUICKIE)CLAMP OR VISE GRIP PLIERS—FIRST PIECE
					208	04 TOGGLE(QUICKIE)CLAMP OR VISE GRIP PLIERS—ADDITIONAL PIECE
					516	05 CLECO,WING NUT TYPE—PER PIECE
					555	06 C CLAMP—FIRST PIECE
					306	07 C CLAMP—ADDITIONAL PIECE
					174	08 SPRING CLAMP—FIRST PIECE
					89	09 SPRING CLAMP—ADDITIONAL PIECE
FFN	U	MAA	KMPHAXX	NDAPRXX	VARIABLE	PART,REMOVE FROM MOUNTING LOCATION OR MATING PART
						STARTS—WITH REACH TO PART
						INCLUDES—ALL MOTIONS NECESSARY TO GRASP PART AND REMOVE FROM MOUNTING LOCATION OR MATING PART
						ENDS—WITH ASIDE PART
						CONDITIONS—NO TIME INCLUDED FOR REMOVAL OF FASTENER(S).NORMAL ACCESS—NO INTERFERENCE WITH PART REMOVAL.
					58	CASE 01 SCREW MOUNTED,MULTI ALIGN PART;NORMAL ACCESS:0-2.5 POUNDS ENW
					91	02 SCREW MOUNTED,MULTI ALIGN PART;NORMAL ACCESS:2.5-20 POUNDS ENW
					97	03 SCREW MOUNTED,MULTI ALIGN PART;NORMAL ACCESS:20-40 POUNDS ENW
					62	04 STUD OR BOLT MOUNTED,MULTI ALIGN PART; NORMAL ACCESS:0-2.5 POUNDS ENW
					95	05 STUD OR BOLT MOUNTED,MULTI ALIGN PART; NORMAL ACCESS:2.5-20 POUNDS ENW
					101	06 STUD OR BOLT MOUNTED,MULTI ALIGN PART; NORMAL ACCESS:20-40 POUNDS ENW
NO	U	MAO	LA1A1	NDAPR07	156	PART,REMOVE FROM MOUNTING LOCATION OR MATING PART,TIGHT FITTING PARTS
						STARTS—WITH REACH TO PART
						INCLUDES—ALL MOTIONS NECESSARY TO GAIN CONTROL OF PART AND SEPARATE FROM MOUNTING LOCATION
						ENDS—WITH SEPARATION OF PARTS
						CONDITIONS—PART REQUIRES MOVING SIDE TO SIDE TO BREAK CONTACT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	KMPHAD3	MOAPRO8	95	PART,REMOVE FROM MATING PART BY PUSHING WITH THUMBS

PART,REMOVE FROM MATING PART BY PUSHING WITH THUMBS
STARTS—WITH REACH TO ASSEMBLY
INCLUDES—ALL MOTIONS NECESSARY TO GET CONTROL
OF ASSEMBLY WITH BOTH HANDS,PUSH WITH THUMBS
TO REMOVE PART,AND GET AND ASIDE REMOVED PART
ENDS—WITH RELEASE OF PART
CONDITIONS—WEIGHT OF PART LESS THAN 2.5 POUNDS
ENW.LENGTH OF ENGAGEMENT NOT TO EXCEED ONE
INCH.

| FFH | U | MAA | KMPHAD5 | MOAPRO9 | 107 | PART,REMOVE FROM MATING PART WITH FINGER |

PART,REMOVE FROM MATING PART WITH FINGER
STARTS—WITH REACH TO PART
INCLUDES—ALL MOTIONS NECESSARY TO POSITION
FINGER IN PART AND PULL FREE FROM MATING PART
ENDS—WITH ASIDE PART
CONDITIONS—PART WEIGHS LESS THAN 2.5 POUNDS
ENW

| FFD | U | MAA | GEAIN1X | TOAPIXX | TABLE | PART,INSTALL INTO HOLE OR ONTO SHAFT |

PART,INSTALL INTO HOLE OR ONTO SHAFT
STARTS—WITH REACH TO GET PART/OBJECT
INCLUDES—ALL THE MOTIONS NECESSARY TO GET PART
OR OBJECT,POSITION TO HOLE OR SHAFT,ALIGN AND
PUSH/PRESS ONTO SHAFT OR INTO HOLE BY HAND,
TOOL OR PRESS
ENDS—WITH PART INSTALLED,HAND ON PART
CONDITIONS—NO TIME FOR WALKING INCLUDED

		ENW OF PART/OBJECT(POUNDS)			
		TO 2.5	2.5 TO 10	TO 2.5	2.5 TO 10
		SYMMETRICAL		NON-SYMMETRICAL	
		A	B	C	D
BY HAND PRESSURE	A	97	110	123	136
NO PRESSURE	B	65	68	91	94
WITH HAMMER	C	432	445	452	471
WITH HAMMER AND DRIFT	D	730	719	750	745
ARBOR PRESS HAND OPER.	E	486	492	506	512
HYDRAULIC PRESS	F	1054	1292	1074	1312

| MF | U | MAF | 3748 | BOPBDO1 | 42 | BRUSH,DIP |

BRUSH,DIP
STARTS—WITH MOVE BRUSH INTO CAN
INCLUDES—ALL MOTIONS NECESSARY TO MOVE BRUSH
TO CAN,DIP,REMOVE,WIPE ON EDGE AND MOVE AWAY
ENDS—WITH EXCESS WIPED FROM BRUSH

| FFH | U | MAA | BOPCWO1 | BOPCWO1 | 38 | CLOTH,WRING TO REMOVE EXCESS FLUID |

CLOTH,WRING TO REMOVE EXCESS FLUID
STARTS—WITH CLOTH IN HAND READY FOR WRINGING
INCLUDES—ALL MOTIONS NECESSARY TO WRING EXCESS
FLUID FROM CLOTH BY TWISTING WITH BOTH HANDS
ENDS—WITH CLOTH IN HAND AFTER WRINGING
CONDITIONS—THIS ELEMENT COVERS WRINGING A
STANDARD SHOP CLOTH MEASURING APPROXIMATELY
14X18 INCHES OR SIMILAR ITEMS

| FFH | U | MAA | BOPHIO1 | BOPHIO1 | 40 | HAND,IMMERSE IN FLUID,REMOVE,AND SHAKE TO REMOVE EXCESS |

HAND,IMMERSE IN FLUID,REMOVE,AND SHAKE TO
REMOVE EXCESS
STARTS—WITH HAND AT SURFACE OF FLUID
INCLUDES—DIP HAND,REMOVE,AND SHAKE ONCE TO
REMOVE EXCESS FLUID
ENDS—WITH HAND OUT OF FLUID
CONDITIONS—APPLIES TO THE IMMERSION OF THE
HAND IN FLUIDS SUCH AS WATER,THINNER,SOLVENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NO	U	MAO	LA18	BDPD001	63	OBJECT,DIP IN VISCOUS MATERIAL SUCH AS GREASE, RED LEAD OR SIMILAR STARTS—WITH PART IN HAND INCLUDES—ALL MOTIONS NECESSARY TO MOVE PART TO COMPOUND,IMMERSE PART,REMOVE PART FROM COMPOUND,AND VISUALLY CHECK COATING ENDS—WITH PART IN HAND
FFM	U	MAA	BDPPIXX	BDPPIXX	VARIABLE	PART,IMMERSE AND SHAKE STARTS—WITH PART IN HAND OR HELD WITH TOOL NEAR SOLUTION INCLUDES—ALL MOTIONS NECESSARY TO IMMERSE PART IN SOLUTION,REMOVE AND SHAKE OFF EXCESS LIQUID ENDS—WITH PART IN HAND OR HELD WITH TOOL NEAR SOLUTION CONDITIONS—APPLIES TO PARTS WITHOUT CAVITIES THAT DO NOT REQUIRE PROCESS TIME TO DRAIN
					73	CASE 01 LARGE PART,10-30 POUNDS
					48	02 MEDIUM PART,5-10 POUNDS
					32	03 SMALL PART,TO FIVE POUNDS
					23	04 VERY SMALL PART,HANDLED WITH TOOL, TWEEZERS,MAGNET,ETC.
MAA	U	MAA	BDPBXXX	TDPDIXX	TABLE	OBJECT,IMMERSE IN LIQUID OR PASTE STARTS—WITH OBJECT IN HAND AND AT SURFACE OF LIQUID OR PASTE INCLUDES—ALL MOTIONS NECESSARY TO IMMERSE AND REMOVE OBJECT OR TO WIPE OFF EXCESS LIQUID OR PASTE ENDS—WITH OBJECT IN HAND READY TO MOVE FOR USE CONDITIONS—AVERAGE IMMERSION APPLIES TO TOLERANCES OF 1/2 INCH OR GREATER,CAREFUL IMMERSION APPLIES TO TOLERANCES OF 1/16 TO 1/2 INCH.WIPE AFTER IMMERSION(CASE CX) IS TO BE ADDED TO CASES AX OR BX AS APPROPRIATE
FFF	U	MAA	BELAPXX	BELAPXX	VARIABLE	APPLY PRESSURE STARTS—WITH BODY MEMBER IN CONTACT WITH OBJECT(S) INCLUDES—EXERTION OF MUSCULAR FORCE ON AN OBJECT TO ACHIEVE CONTROL,TO RESTRAIN OR TO OVERCOME RESISTANCE TO MOTION ENDS—WITH ACTING BODY MEMBER IN CONTACT WITH OBJECT(S)
					16	CASE 01 REGRASP OR SQUEEZE AND APPLICATION OF PRESSURE
					11	02 APPLICATION OF PRESSURE ONLY
FFF	U	MAA	BELDEXX	BELDEXX	VARIABLE	DISENGAGE ONE OBJECT FROM ANOTHER OBJECT STARTS—WITH HAND ON AN OBJECT JOINED WITH ANOTHER OBJECT INCLUDES—THE SUDDEN END OF CONTACT RESISTANCE BETWEEN TWO OR MORE OBJECTS PREVIOUSLY JOINED, EVIDENCED BY AN INVOLUNTARY RECOIL MOTION ENDS—WITH HAND ON OBJECT DETACHED CONDITION—FOR OBJECTS DIFFICULT TO HANDLE ADD BEL-RG-01
					4	CASE 01 DISENGAGE,LOOSE
					8	02 DISENGAGE,CLOSE
					23	03 DISENGAGE,TIGHT

For the OBJECT,IMMERSE IN LIQUID OR PASTE element:

	DEPTH OF IMMERSION(INCHES)		
	TO-1	1-3	3-9
	A	B	C
AVERAGE IMMERSION A	4	9	18
CAREFUL IMMERSION B	10	14	24
WIPE AFTER IMMERSION C	4	10	21

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFA	U	MAA	RELFD01	BELED01	7	**EXTENDED DISTANCE** STARTS—AT THE END OF A 27 INCH REACH OR MOVE INCLUDES—NECESSARY TIME FOR AN ADDITIONAL TEN INCH REACH OR MOVE ENDS—AT THE END OF THE EXTENDED REACH OR MOVE CONDITION—TIME FOR MOVES AND REACHES GREATER THAN 27 INCHES IN INCREMENTS OF TEN INCHES
FFF	U	MAA	RELEF01	BELEF01	7	**EYE,FOCUS ON OBJECT** STARTS—WITH THE EYES AT REST INCLUDES—THE EYES CONCENTRATING ON A GIVEN CHARACTERISTIC OF AN OBJECT WITHIN THE AREA OF NORMAL VISION LONG ENOUGH TO DISTINGUISH IT THROUGH MUSCULAR ADJUSTMENT OF THE LENS ENDS—WITH THE EYES AT REST
FFF	U	MAA	BELETXX	BELETXX	VARIABLE	**EYE,TRAVEL** STARTS—WHEN EYE BEGINS TO SHIFT AIM OF AXIS OF VISION INCLUDES—MOVEMENT OF THE AIM OF AXIS OF VISION TO NEW VIEWING AREA ENDS—WHEN EYE MOVEMENT STOPS CONDITION—MAXIMUM VALUE 20 TMU
					1	CASE 01 EYE TRAVEL OF 1 INCH WITH EYES 15 INCHES FROM OBJECT
					6	02 EYE TRAVEL OF 1 FOOT WITH EYES 30 INCHES FROM OBJECT
					20	03 EYE TRAVEL 70 DEGREES
FFF	U	MAA	BELRG01	BELRG01	6	**REGRASP** STARTS—WITH OBJECT IN HAND INCLUDES—SHIFTING THE HOLD OR REALIGNING THE FINGERS ON AN OBJECT TO IMPROVE OR INCREASE CONTROL ENDS—WITH OBJECT IN HAND
NS	U	MAL	MTM-86	BELTO01	27	**TIME,OBSERVE** STARTS—WITH EYE TRAVEL TO CLOCK INCLUDES—ALL EYE TRAVEL AND EYE FOCUSES NECESSARY TO OBSERVE TIME ENDS—WITH TIME NOTED
FFF	U	MAA	BELTSXX	BELTSXX	VARIABLE	**TURN WRIST,SHIFT GRASP AND TURN,WITH OR WITHOUT PRESSURE** STARTS—WITH HAND ON AN OBJECT INCLUDES—TURNING AN OBJECT WITH A TURN MOTION AND SHIFTING THE GRASP BY RELEASING,TURNING THE HAND BACK,AND GRASPING THE OBJECT ENDS—WITH THE HAND ON THE OBJECT CONDITION—CASES 03 AND 04 INCLUDE AN APA FOR APPLICATION OF PRESSURE.IF AN APB IS REQUIRED, SUPPLEMENT THIS ELEMENT WITH BEL-RG-01
					12	CASE 01 TURN TO 90 DEGREES WITHOUT PRESSURE
					19	02 TURN 90-180 DEGREES WITHOUT PRESSURE
					23	03 TURN TO 90 DEGREES WITH PRESSURE
					29	04 TURN 90-180 DEGREES WITH PRESSURE
FFF	U	MAA	BELTWXX	BELTWXX	VARIABLE	**TURN WRIST,TURN ONLY,WITH OR WITHOUT PRESSURE** STARTS—WTIH HAND EMPTY OR LOADED INCLUDES—ROTATING THE HAND,WRIST, AND FOREARM ABOUT THE LONG AXIS OF THE FOREARM ENDS—WITH HAND EMPTY OR LOADED CONDITIONS—IF HAND IS LOADED WITH WEIGHT EXCEEDING 2.5 POUNDS,SUPPLEMENT WITH TEL-WF-XX CASES 03 AND 04 INCLUDE AN APA FOR APPLICATION OF PRESSURE. IF AN APB IS REQUIRED, SUPLEMENT WITH BEL-RG-01.
					4	CASE 01 TURN TO 90 DEGREES WITHOUT PRESSURE
					7	02 TURN 90-180 DEGREES WITHOUT PRESSURE
					15	03 TURN TO 90 DEGREES WITH PRESSURE
					18	04 TURN 90-180 DEGREES WITH PRESSURE

DATA SOURCE	OCCUP-ATION	QUALITY CODE	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	BELWXXX	TELWFXX	TABLE	WEIGHT FACTOR,FIRST AND ADDITIONAL STARTS—WHEN GRASP IS COMPLETED INCLUDES—ADDITIONAL TIME FOR MOVES WITH WEIGHT IN EXCESS OF 2.5 POUNDS ENDS—WHEN MOVE IS COMPLETED

EFFECTIVE NET WEIGHT(POUNDS)		WEIGHT FACTOR FIRST,STATIC AND DYNAMIC A	ADDITIONAL, DYNAMIC ONLY B
2.5—10	A	3	1
10—20	B	8	2
20—30	C	12	3
30—40	D	17	4
40—50	E	22	6

DATA SOURCE	OCCUP-ATION	QUALITY CODE	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

FFH	U	FAL	HSTTTXX	BEVVTXX	VARIABLE	VEHICLE,TRAVEL
						STARTS—WHEN VEHICLE STARTS TO MOVE
						INCLUDES—ALL THE TIME NECESSARY FOR A VEHICLE
						    TO MOVE 100 FEET
						ENDS—WHEN VEHICLE STOPS MOVING
						CONDITIONS—VEHICLES MOVE AT AVERAGE SPEEDS
						    LISTED BELOW—TIMES ARE FOR 100 FEET OF TRAVEL—
						    DOES NOT INCLUDE GETTING IN OR OUT OF VEHICLE

					1894	CASE 01 MOVE AT ONE M.P.H.
					947	02 MOVE AT TWO M.P.H.
					631	03 MOVE AT THREE M.P.H.
					473	04 MOVE AT FOUR M.P.H.
					379	05 MOVE AT FIVE M.P.H.
					189	06 MOVE AT 10 M.P.H.
					126	07 MOVE AT 15 M.P.H.
					95	08 MOVE AT 20 M.P.H.
					76	09 MOVE AT 25 M.P.H.
					63	10 MOVE AT 30 M.P.H.
DL	U	MAL	BEMTM07	MEVSF01	177	SEATBELT,FASTEN AND UNFASTEN STARTS—WITH REACH TO SEATBELT INCLUDES—ALL MOTIONS NECESSARY TO FASTEN, TIGHTEN,AND UNFASTEN AND LAY ASIDE A SEAT BELT ENDS—WITH RELEASE OF BELT

DL	U	MAL	BEMTM09	MEVTM01	521	TRUCK,MOUNT AND DISMOUNT
						STARTS—WITH REACH TO DOOR HANDLE ON TRUCK CAB
						INCLUDES—ALL MOTIONS NECESSARY TO OPEN DOOR,
						    CLIMB INTO CAB,CLOSE DOOR,OPEN DOOR,CLIMB OUT
						    OF CAB,AND CLOSE DOOR
						ENDS—WITH OPERATOR STANDING BESIDE TRUCK
						CONDITION—APPLICABLE TO 1/2 TO 2 1/2 TON TRUCK

DL	U	MDL	BEMTM10	MEVTS01	395	TRUCK,START AND STOP
						STARTS—WITH MOVE FOOT TO CLUTCH
						INCLUDES—ALL MOTIONS NECESSARY TO START
						    ENGINE,SHIFT INTO GEAR,RELEASE BRAKE,GRASP
						    STEERING WHEEL READY TO DRIVE,SET HAND BRAKE,
						    AND TURN IGNITION OFF
						ENDS—WITH MOVE FOOT FROM CLUTCH

MF	U	MAF	2604	BGMAC01	103	ALIGNMENT,CHECK WITH STRAIGHTEDGE
						STARTS—WITH STRAIGHTEDGE IN HAND
						INCLUDES—ALL MOTIONS NECESSARY TO CHECK
						    ALIGNMENT WITH STRAIGHTEDGE AT THREE LOCATIONS
						ENDS WITH STRAIGHTEDGE IN HAND
						CONDITION—DOES NOT INCLUDE TIME FOR MOVING
						    PARTS TO ALIGN

MF	U	MAF	2603	BGMAC02	120	ALIGNMENT,CHECK WITH LEVEL
						STARTS—WITH LEVEL IN HAND
						INCLUDES—ALL MOTIONS NECESSARY TO MOVE LEVEL
						    TO OBJECT TO BE CHECKED,ADJUST POSITION OF
						    LEVEL,LOOK AT BUBBLE,AND MOVE LEVEL ASIDE
						ENDS—WITH LEVEL IN HAND
						CONDITION—ADJUSTMENT OF PART IS NOT INCLUDED

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BITRR01	BGMRR01	22	RULE,READ TO COMPARE MARK ALIGNMENT STARTS—WITH EYES ON RULE AND RULE IN PLACE INCLUDES—FOCUSING EYES ON RULE AND COMPARING MARK ALIGNMENT ENDS—WITH EYES ON RULE
NF	U	MAF	332	BGMSA01	44	SQUARE,ALIGN TO MARK STARTS—WITH SQUARE IN HAND INCLUDES—ALL MOTIONS NECESSARY TO MOVE AND POSITION SQUARE TO MARK ENDS—WITH SQUARE POSITIONED CONDITION—ALIGN TO MARK WITHIN 1/16 INCH OR LESS
NF	U	MAF	2612	BGMSU01	139	SQUARE,USE(PART IN HAND) STARTS—WITH PART AND SQUARE IN SEPARATE HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO PLACE PART AND SQUARE TOGETHER,SIGHT,ALIGN AND CHECK ALIGNMENT ENDS—WITH PART AND SQUARE IN SEPARATE HANDS
NF	U	MAF	2611	BGMSU02	218	SQUARE,USE(PART ON BENCH) STARTS—WITH SQUARE IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE SQUARE TO PART(JOB),POSITION SQUARE,BEND, OBSERVE,ARISE ENDS—WITH SQUARE MOVED AWAY FROM JOB CONDITIONS—CAN BE PERFORMED BY EITHER HAND
DL	U	MAL	BMMM	MGMMAXX	VARIABLE 115 11	MATERIAL,MEASURE LENGTH OF STARTS—WITH TAPE MEASURE IN HAND AND TURNING OF THE BODY TO THE END OF THE MATERIAL INCLUDES—ALL THE TIME NECESSARY TO POSITION A TAPE MEASURE AND MEASURE A PIECE OF MATERIAL ENDS—WITH TAPE MEASURE HELD TO THE MATERIAL CASE 01 FIRST TWO FEET OF LENGTH MEASURED 02 EACH ADDITIONAL TWO FEET MEASURED
AE	U	MAW	FMGFRXX	MGMRUXX	VARIABLE 481 189	RULE(SIX—FOOT FOLDING),USE STARTS—WITH FOLDED RULE IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO UNFOLD EIGHT SECTIONS OF A SIX—FOOT RULE,POSITION RULE TO WORK,CHECK MEASUREMENT,MOVE RULE FROM WORK,AND FOLD RULE ENDS—WITH FOLDED RULE IN HAND CASE 01 FIRST MEASUREMENT 02 EACH ADDITIONAL MEASUREMENT
NF	U	MAF	1018	MGMSUXX	VARIABLE 694 926 544 776	SCALE,USE STARTS—WITH A REACH TO SCALE INCLUDES—ALL THE MOTIONS NECESSARY TO GET, ORIENT,MOVE SCALE TO PART, POSITION END, CHECK,ADJUST,READ AND CHECK READING ENDS—WITH RELEASE OF SCALE CASE 01 READ TO 1/16 INCH ON 36 INCH SCALE 02 READ TO 0.010 INCH ON 36 INCH SCALE 03 READ TO 1/16 INCH ON 12 INCH SCALE 04 READ TO 0.010 INCH ON 12 INCH SCALE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	NGTXXXX	TGTOGXX	TABLE	OBJECT,GET AND PLACE

OBJECT,GET AND PLACE
STARTS—WITH REACH TO OBJECT
INCLUDES—ALL MOTIONS NECESSARY TO GET AND
   PLACE AN OBJECT
ENDS—WITH RELEASE OF THE OBJECT
CONDITIONS—APPLICABLE TO WEIGHTS OF 2.5 POUNDS
   OR LESS(EFFECTIVE NET WEIGHT).TO DETERMINE
   DISTANCE CODE TO BE USED,COMPUTE THE AVERAGE
   OF THE REACH AND MOVE DISTANCE

TYPE GET & CONDITION OF MOVE		DISTANCE(INCHES)					
		TO 1	1-3	3-9	9-15	15-21	21-27
		A	B	C	D	E	F
EASY GRASP							
VARIABLE	A	8	13	22	30	38	47
LOOSE	B	16	21	31	40	49	59
CLOSE	C	26	31	42	50	60	70
EXACT	D	53	58	68	77	86	97
OTHER HAND	E	14	17	27	36	44	54
THREADED FASTENER	F	32	37	47	56	65	75
JUMBLED W/ONE HAND							
VARIABLE	G	15	22	30	38	47	55
LOOSE	H	23	30	39	48	58	67
CLOSE	J	33	40	50	58	69	78
EXACT	K	60	67	76	85	95	105
OTHER HAND	L	21	26	35	44	53	62
THREADED FASTENER	M	39	46	55	64	74	83
SIMO JUMBLED OBJECT							
VARIABLE	N	26	33	41	49	58	66
LOOSE	P	34	41	50	59	69	78
CLOSE	R	44	51	61	69	80	89
EXACT	S	71	78	87	96	106	116
THREADED FASTENER	T	76	83	92	101	111	120

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	NAA	BGTXXXX	TGTOOXX	TABLE	OBJECT,OBTAIN

OBJECT,OBTAIN
STARTS—WITH REACH TO AN OBJECT
INCLUDES—REACH TO THE OBJECT,GAIN CONTROL,AND
   RELEASE THE OBJECT
ENDS—WHEN OBJECT IS RELEASED

TYPE OF GRASP AND OBJECT LOCATION		DISTANCE REACHED(INCHES)					
		TO 1	1-3	3-9	9-15	15-21	21-27
		A	B	C	D	E	F
CONTACT							
FIXED	A	2	4	7	10	12	15
VARIABLE	B	2	4	9	13	17	22
EASY GRASP							
FIXED	C	6	8	11	14	16	19
VARIABLE	D	6	8	13	17	21	26
GET ADD. OBJECT	E	17	19				
JUMBLED							
ONE HAND	F	13	17	21	25	30	34
SIMO	G	24	28	32	36	41	45
GET ADD. OBJECT	H	24	28				
HANDFUL	J	33	35	39	44	48	52

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

AF	U	MAO	PRMH001	BIDSS01	65	STAMP(METAL),STRIKE WITH HAMMER
						STARTS—WITH HAMMER AND STAMP IN HAND
						INCLUDES—ALL MOTIONS NECESSARY TO PLACE STAMP,
						  STRIKE ONE BLOW WITH HAMMER,MOVE STAMP AND
						  HAMMER ASIDE,AND INSPECT MARKING
						ENDS—WITH HAMMER AND STAMP IN HAND AND EYES
						  FOCUSED ON MARKING

AF	U	MAO	STA0001	MIDAIXX	VARIABLE	INK(OR PAINT),APPLY TO STENCIL WITH DAUBER
						STARTS—WITH STENCIL IN POSITION,HELD WITH LEFT
						  HAND
						INCLUDES—ALL MOTIONS NECESSARY TO APPLY INK TO
						  SIX INCH LENGTH OF STENCIL WITH ONE INCH
						  LETTERS OR TO GET ADDITIONAL INK ON DAUBER
						ENDS—WITH STENCIL IN LEFT HAND

					187	CASE 01 GET DAUBER,APPLY INK TO FIRST SIX INCH LENGTH
					112	02 APPLY INK TO ADDITIONAL SIX INCHES WITHOUT RESUPPLY OF INK
					55	03 APPLY ADDITIONAL INK TO DAUBER

NAA	U	MAA	OTLSRXX	MIDASXX	VARIABLE	STAMP(RUBBER),APPLY
						STARTS—WITH REACH TO STAMP
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET
						  STAMP,REMOVE CAP OR COVER,INK STAMP AND APPLY,
						  REPLACE CAP OR COVER AND INCLUDES MOTIONS TO
						  REINK AND APPLY ADDITIONAL TIMES
						ENDS—WITH ASIDE STAMP

					129	CASE 01 FIRST APPLICATION—OBTAIN STAMP FROM, AND ASIDE TO BENCH TOP
					168	02 FIRST APPLICATION—OBTAIN STAMP FROM, ASIDE TO POCKET
					204	03 FIRST APPLICATION—OBTAIN STAMP FROM, ASIDE TO DRAWER
					61	04 EACH ADDITIONAL APPLICATION

FFE	U	MAA	GIDCS01	MIDDC01	126	DATE,CHANGE,ADJUSTABLE RUBBER DATE STAMP
						STARTS—WITH STAMP IN HAND
						INCLUDES—ALL MOTIONS NECESSARY TO TURN STAMP
						  TO SEE DATE AND TURN KNURLED WHEEL TO CHANGE
						  TO CURRENT DATE
						ENDS—WITH STAMP IN HAND
						CONDITION—TIME IS BASED ON CHANGING DATE ON
						  AVERAGE WORKDAY AND INCLUDES CHANGING DAY,
						  MONTH, AND YEAR ON A PRO RATA BASIS

FFE	U	MAA	GSCDAA3	MIDDI01	346	DECAL(NON-PRESSURE SENSITIVE),INSTALL
						STARTS—WITH OBTAIN DECAL
						INCLUDES—ALL THE MOTIONS NECESSARY TO PUT
						  DECAL INTO WATER,REMOVE AND SLIP FROM BACKING,
						  POSITION,SMOOTH DOWN AND DRY WITH CLOTH
						ENDS—WITH DECAL IN PLACE,CLOTH ASIDE
						CONDITIONS—DECALS UP TO 4X6 INCHES
						  PROCESS TIME TO SOAK DECAL IS NOT INCLUDED IN
						  THIS ELEMENT

FFE	U	MAA	OITITKN	MIDDR01	368	DECAL,REMOVE WITH TOOL
						STARTS—WITH REACH TO TOOL
						INCLUDES—ALL MOTIONS NECESSARY TO GET TOOL,
						  SCRAPE DECAL OFF AN OBJECT,ASIDE TOOL,WIPE
						  SCRAPINGS IN PILE,PUSH SCRAPINGS INTO OTHER
						  HAND,AND ASIDE SCRAPINGS TO WASTE CAN
						ENDS—WITH RELEASE OF SCRAPINGS
						CONDITIONS—TOOL IS RAZOR BLADE OR SIMILAR.
						  APPROXIMATELY EIGHT STROKES 1-3 INCHES LONG
						  ARE REQUIRED TO REMOVE DECAL.

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION

AF	U	MAO	STAI001	MIDIAXX	VARIABLE	INK(OR PAINT),APPLY TO STENCIL W/ROLLER
						  STARTS-WITH STENCIL IN POSITION WITH LEFT HAND
						    REACHING TO ROLLER WITH RIGHT HAND
						  INCLUDES-ALL THE MOTIONS NECESSARY TO GET
						    ROLLER,ROLL OVER PAD TO INK ROLLER THEN COVER
						    STENCIL WITH INK OR PAINT AND ASIDE ROLLER
						  ENDS-WITH STENCIL IN LEFT HAND ROLLER ASIDE

					166	CASE 01 1-2 INCH LETTERS SIX INCH LINE
					91	02 EACH ADDITIONAL SIX INCH LINE WITHOUT APPLYING ADDITIONAL INK TO ROLLER
					82	03 APPLY ADDITIONAL INK TO ROLLER

FFE	U	MAA	GSCLAA9	MIDPA01	609	PAINT,APPLY TO IDENTIFICATION PLATE
						  STARTS-WITH GET PAINT
						  INCLUDES-ALL THE MOTIONS NECESSARY TO PAINT
						    IDENTIFICATION PLATE AFTER PLATE HAS BEEN
						    STAMPED AND WIPE OFF EXCESS PAINT
						  ENDS-WITH ASIDE WIPE CLOTH

AF	U	MAO	STAS001	MIDSA01	94	STENCIL,APPLY WITH BLOCK STAMP
						  STARTS-WITH REACH TO STAMP
						  INCLUDES-ALL THE MOTIONS NECESSARY TO GET THE
						    BLOCK STAMP,INK THE STAMP,APPLY THE STENCIL
						    AND ASIDE THE STAMP
						  ENDS-WITH THE RELEASE OF THE STAMP

AF	U	MAO	STPS002	MIDSP01	68	STENCIL,POSITION TO SURFACE
						  STARTS-WITH REACH TO STENCIL
						  INCLUDES-ALL THE MOTIONS NECESSARY TO GET
						    STENCIL,POSITION ON SURFACE OF PALLET OR BOX
						    (HORIZONTAL OR VERTICAL)
						  ENDS-WITH LEFT HAND HOLDING STENCIL ON SURFACE
						    TO BE STENCILED,RIGHT HAND FREE TO MOVE TO
						    NEXT OPERATION

NO	U	MAO	LA1E-4	MIDSS01	2800	STAMP(GANG),SET UP(10 MARKERS)
						  STARTS-WITH REACH TO GET STAMP HOLDER
						  INCLUDES-ALL THE MOTIONS NECESSARY TO GET
						    STAMP BOX,SELECT MARKERS,REMOVE MARKERS FROM
						    SLOT,PLACE MARKERS IN HOLDER AND PUSH AGAINST
						    STOP,RELEASE MARKER,REGRASP HOLDER AND DEPRESS
						    THUMB LEVER TO STOP,RELEASE LEVER
						  ENDS-WITH STAMP SET UP
						  CONDITIONS-DOES NOT INCLUDE TIME TO OBTAIN AND
						    ASIDE STAMP HOLDER

DL	U	MAL	BMTT	MIDTA01	239	TAG,ATTACH TO OBJECT,WITH STRING(TIED)
						  STARTS-WITH REACH TO STRING TAG IN IMMEDIATE
						    WORK AREA
						  INCLUDES-ALL THE TIME NECESSARY TO ATTACH A
						    STRINGED TAG TO AN ITEM BY TYING
						  ENDS-WITH THE RELEASE OF THE TAG AFTER TYING

FFE	U	MAA	MIDT001	MIDTA02	185	TAG,ATTACH TO OBJECT WITH STRING(TAG PULLED THROUGH LOOP)
						  STARTS-WITH TAG IN HAND
						  INCLUDES-ALL THE MOTIONS NECESSARY TO ATTACH
						    TAG BY INSERTING STRING THROUGH OBJECT,FORMING
						    LOOP,AND PULLING TAG THROUGH LOOP
						  ENDS-WITH HAND IN CONTACT WITH TAG

FFF	U	MAA	MJPOT04	MIDTA03	249	TAG,ATTACH TO OBJECT BY FORMING SLIP LOOP IN STRING
						  STARTS-WITH REACH TO TAG WITH STRING ATTACHED
						  INCLUDES-ALL MOTIONS NECESSARY TO GET TAG,FORM
						    SLIP LOOP IN STRING,PLACE LOOP OVER OBJECT,AND
						    PULL TIGHT
						  ENDS-WITH RELEASE OF TAG

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	MIDAT01	MIDTA04	436	TAG,ATTACH STRING STARTS—WITH STRING AND TAG IN HAND INCLUDES—ALL MOTIONS NECESSARY TO TIE KNOT IN STRING,PLACE STRING THROUGH HOLE IN TAG AND SECURE STRING WITH LOOP ENDS—WITH TAG IN HAND CONDITION—DOES NOT INCLUDE ATTACHING TAG TO OBJECT
DL	U	MAL	BMTW	MIDTA05	271	TAG(OR ENVELOPE),ATTACH TO OBJECT WITH WIRE (TWISTED) STARTS—WITH REACH TO WIRE TAG OR ENVELOPE IN IMMEDIATE WORK AREA INCLUDES—ALL THE TIME NECESSARY TO ATTACH A TAG OR AN ENVELOPE WITH WIRE TO AN ITEM ENDS—WITH THE RELEASE OF THE TAG AFTER ATTACHING
FFE	U	MAA	MIDT002	MIDTA06	317	TAG,ATTACH TO OBJECT WITH WIRE(LOOPED AND TWISTED) STARTS—WITH TAG IN HAND INCLUDES—ALL MOTIONS NECESSARY TO ATTACH TAG WITH DOUBLE WIRE BY THREADING WIRE THROUGH OBJECT,BENDING OVER,AND TWISTING ENDS—WITH HAND IN CONTACT WITH WIRE
FFE	U	MAA	MIDAT02	MIDTA07	356	TAG,ATTACH WIRE STARTS—WITH WIRE AND TAG IN HANDS INCLUDES—ALL MOTIONS NECESSARY TO ATTACH WIRE TO TAG ENDS—WITH TAG IN HAND CONDITIONS—DOES NOT INCLUDE ATTACHING TAG TO OBJECT
FFF	U	MAA	MJPDTXX	MIDTRXX	VARIABLE	TAG,REMOVE FROM OBJECT STARTS—WITH GET TAG INCLUDES—ALL MOTIONS NECESSARY TO REMOVE TAG FROM OBJECT ENDS—WITH PLACE TAG ASIDE
					211	CASE 01 UNTWIST WIRE AND REMOVE TAG FROM OBJECT
					130	02 GET WIRE CUTTERS,CUT WIRE,AND REMOVE TAG FROM OBJECT
					174	03 OPEN SLIP LOOP AND SLIDE TAG THROUGH LOOP TO REMOVE FROM OBJECT
					73	04 OPEN LOOP AND SLIP LOOP FROM OBJECT TO REMOVE TAG
FFE	U	MAA	IOTADA1	SIDDI01	468	DECAL(PRESSURE SENSITIVE),INSTALL,TO 1.5 X 2.5 INCHES STARTS—WITH GET DECAL INCLUDES—ALL MOTIONS NECESSARY TO REMOVE BACKING FROM DECAL WITH FINGERS,GET DAMP RAG, WIPE SURFACE WITH RAG,ASIDE RAG,PLACE DECAL ON SURFACE,RUB DECAL WITH FINGERS TO SEAT AND SMOOTH,GET DRY RAG,AND USE DRY RAG TO BLOT MOISTURE FROM SURFACE ENDS—WITH ASIDE RAG
FFE	U	MAA	GIDASA1	SIDSA01	1416	STENCIL,APPLY,PAINT,AND REMOVE STARTS—WITH REACH TO ROLL OF TAPE INCLUDES—ALL MOTIONS NECESSARY TO GET ROLL OF TAPE,UNROLL AND TEAR OFF FOUR PIECES OF TAPE (APPROXIMATELY SIX INCHES LONG),LOCATE STENCIL ON SURFACE,AFFIX TAPE TO STENCIL,SMOOTH TAPE ON STENCIL,GET SPRAY GUN,SPRAY STENCIL,ASIDE SPRAY GUN,AND REMOVE STENCIL ENDS—WITH ASIDE STENCIL

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	SPLOM01	S1DTA01	640	TAPE,ATTACH TO PART AND WRITE IDENTIFICATION ON TAPE STARTS—WITH REACH TO GET ROLL OF TAPE INCLUDES—ALL THE MOTIONS NECESSARY TO PICK UP ROLL OF TAPE,ROTATE ROLL TO FIND END,LIFT END OF TAPE FROM ROLL,PULL TAPE(TWO INCHES),TEAR OFF PIECE,PLACE TAPE ON PART,GET PENCIL FROM POCKET,WRITE DIGITS(6)ON TAPE,RETURN PENCIL TO POCKET ENDS—WITH RELEASE OF PENCIL
FFH	U	MAA	BITBI01	BITBI01	20	GAUGE(BORE INDICATOR),USE STARTS—WITH GAUGE IN PLACE AND READY FOR CHECKING INCLUDES—ALL MOTIONS NECESSARY TO CHECK BORE DIAMETER PER POSITION OR SPOT ENDS—WITH GAUGE LOCATED IN PART
NO	U	MAO	LGAU1L2	BITCA01	79	CALIPER(VERNIER),ADJUST SLIDING HEAD,FOUR INCHES STARTS—WITH CALIPER IN HANDS INCLUDES—ALL MOTIONS NECESSARY TO LOOSEN LOCK NUT,MOVE HEAD FOUR INCHES,AND TIGHTEN LOCK NUT ENDS—WITH CALIPER IN HAND
NF	U	MAF	1011	BITCOXX	VARIABLE	CALIPER,OPEN OR CLOSE STARTS—WITH CALIPERS IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO OPEN OR CLOSE CALIPER ENDS—WITH CALIPER IN HAND
					48	CASE 01 FIRM JOINT,24 INCH CALIPER—OPEN 20 IN.
					224	02 SPRING,EIGHT INCH CALIPER—OPEN OR CLOSE FOUR INCHES BY ROLLING ADJUSTING NUT ON FINGER
NF	U	MAF	3776	BITCSXX	VARIABLE	CALIPER,SET WITH SCALE STARTS—WITH CALIPER AND SCALE IN SEPARATE HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO SET CALIPER WITH A SCALE ENDS—WITH CALIPER AND SCALE IN SEPARATE HANDS CONDITIONS—SET WITHIN 1/16 INCH
					391	CASE 01 FIRM JOINT,24 INCH CALIPER
					215	02 SPRING,8 INCH CALIPER
NF	U	MAF	4132	BITCUXX	VARIABLE	CALIPER,USE STARTS—WITH CALIPER IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE CALIPERS TO WORK AND USE AS INDICATED ENDS—WITH MOVE OF CALIPERS AWAY FROM PART AFTER GAUGING CONDITIONS—GAUGE ONE DIMENSION ONLY
					405	CASE 01 SPRING INSIDE CALIPER—DIMENSION UP TO EIGHT INCHES
					363	02 SPRING OUTSIDE CALIPER—DIMENSION UP TO EIGHT INCHES
					875	03 24 INCH FIRM JOINT,INSIDE,CALIPER
					539	04 24 INCH FIRM JOINT,OUTSIDE CALIPER
					293	05 VERNIER CALIPER—DIMENSION UNDER 12 INCHES
					592	06 VERNIER CALIPER—DIMENSION OVER 12 INCHES

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BITVC01	BITCU07	92	CALIPER(VERNIER),USE TO MAKE ADDITIONAL CHECK ON INSIDE OR OUTSIDE DIMENSION STARTS—WITH CALIPER IN/ON OBJECT TO BE MEASURED INCLUDES—ALL MOTIONS NECESSARY TO ADJUST CALIPER TO OBJECT,ADJUST VERNIER,REMOVE CALIPER TO A POSITION FOR READING,AND LOOSENING CLAMP SCREW IN PREPARATION FOR NEXT USE ENDS—WITH CALIPER IN HAND CONDITION—DOES NOT INCLUDE TIME TO READ
FFE	U	MAA	KITMCC1	BITCU08	211	CALIPER,USE,CHECK OUTSIDE DIAMETER WITH PRE-SET SPRING CALIPER STARTS—WITH CALIPER IN HAND READY TO PLACE TO PART INCLUDES—ALL THE MOTIONS NECESSARY TO PLACE CALIPER TO PART,ALIGN AND CHECK FOR FEEL ENDS—WITH CALIPER ON PART CONDITIONS—DOES NOT INCLUDE TIME TO ADJUST OR CHECK CALIPER WITH SCALE
FFH	U	MAA	BITDI01	BITDI01	26	INDICATOR(DIAL),USE TO CHECK POSITION OR SPOT STARTS—WITH PART TO GAUGE AND READY FOR CHECKING INCLUDES—ALL MOTIONS NECESSARY TO CHECK ONE POSITION OR SPOT ENDS—WITH PART IN CONTACT WITH GAUGE
NAA	U	MAA	BITETXX	BITETXX	VARIABLE	EYE TIMES,SHIFT FROM POINT TO POINT STARTS—WHEN EYES BEGIN TO SHIFT FROM ONE POINT TO ANOTHER INCLUDES—TRAVEL OF THE EYES BETWEEN TWO POINTS AND FOCUSING ON THE SECOND POINT ENDS—WHEN THE EYES FOCUS ON THE SECOND POINT CONDITIONS—MAXIMUM EYE TRAVEL IS 20 INCHES AT 15.2 INCHES FROM PART
					8	CASE 01 LESS THAN 1 INCH TRAVEL
					9	02 1-3 INCHES TRAVEL
					13	03 3-9 INCHES TRAVEL
					19	04 9-15 INCHES TRAVEL
					25	05 15-21 INCHES TRAVEL
					27	06 21-27 INCHES TRAVEL
FFH	U	MAA	BITFE01	BITFE01	28	GAUGE(FEELER),USE TO CHECK CLEARANCE,PER SPOT, POSITION,OR FIRST INCH STARTS—WITH GAUGE TO PART READY FOR CHECKING INCLUDES—ALL MOTIONS NECESSARY TO CHECK CLEARANCE ENDS—WITH GAUGE IN CONTACT WITH PART
FFD	U	MAA	BITFU02	BITFE02	9	GAUGE(FEELER),USE TO CHECK CLEARANCE, ADDITIONAL INCH STARTS—WITH GAUGE IN POSITION TO CHECK CLEARANCE INCLUDES—ALL MOTIONS NECESSARY TO MOVE FEELER ALONG GAP AND FEEL FOR CLEARANCE ENDS—WITH GAUGE IN CONTACT WITH PART
FFD	U	MAA	BITFS01	BITFE03	89	GAUGE(FEELER),SELECT FIRST LEAF FROM FAN TYPE FEELER IN METAL CASE STARTS—WITH GAUGE IN HAND INCLUDES—ALL MOTIONS NECESSARY TO FAN LEAVES, SELECT LEAF,AND FOLD OTHER LEAVES INTO CASE ENDS—WITH GAUGE IN HAND

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BITFS02	BITFE04	38	GAUGE(FEELER),SELECT ADDITIONAL LEAF FROM FAN TYPE FEELER,LEAVES PREVIOUSLY MOVED OUT OF CASE STARTS—WITH GAUGE IN HAND AND LEAVES OUT OF CASE INCLUDES—ALL MOTIONS NECESSARY TO SPREAD LEAVES AND SELECT LEAF ENDS—WITH GAUGE IN HAND
FFH	U	MAA	BITFP01	BITFP01	8	GAUGE(FLUSH PIN),USE STARTS—WITH GAUGE IN PLACE FOR CHECKING INCLUDES—ALL MOTIONS NECESSARY TO CHECK POSITION OF GAUGE WITH FINGERS ENDS—WITH GAUGE IN CONTACT WITH PART
FF	U	MAA	BITG001	BITG001	20	GAUGE(GRINDER),USE—CHECK OUTSIDE DIAMETER STARTS—WITH HAND ON GAUGE INCLUDES—ALL MOTIONS NECESSARY TO PLACE GAUGE IN POSITION FOR GRINDING ENDS—WITH RELEASE OF GAUGE
FFD	U	MAA	BITDS02	BITGS01	166	GAUGE(PASSAMETER),SET GAUGE WITH GAUGE BLOCK STARTS—WITH HANDS ON GAUGE,GAUGE BLOCK LYING BY GAUGE INCLUDES—ALL MOTIONS NECESSARY TO SET GAUGE TO GAUGE BLOCK DIMENSION ENDS—WITH RELEASE OF GAUGE BLOCK,GAUGE IN HAND
MF	U	MAF	1024	BITGU01	428	GAUGE(RING GAUGE), USE STARTS—WITH GAUGE IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO TRY A RING GAUGE BY MOVING GAUGE TO JOB,POSITION ON JOB,FIT BY FORCE,DISENGAGE AND RETURN TO BODY ENDS—WITH GAUGE RETURNED TO BODY
AE	U	MAW	FINVE01	BITIR01	44	INDICATOR(DIAL),READ STARTS—WITH EYES AT REST ON INSTRUMENT TO BE READ INCLUDES—FOCUSING EYES TO VERIFY INSTRUMENT SETTING OR READING ENDS—WITH EYES AT REST ON INSTRUMENT CONDITION—ALSO APPLICABLE TO READING SIGHT GUAGES
FFD	U	MAA	BITDS01	BITIS01	49	INDICATOR(DIAL),SET TO ZERO STARTS—WITH HANDS ON INDICATOR INCLUDES—ALL MOTIONS NECESSARY TO SET DIAL INDICATOR TO ZERO ENDS—WITH HANDS ON INDICATOR CONDITION—APPLICABLE TO DIAL INDICATOR WITH FRICTION RING OR WITH UNLOCKED LOCK SCREW
FFD	U	MAA	BITDU01	BITIU01	14	INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE,FIRST INCH STARTS—WITH GAUGE IN HAND NEAR PART INCLUDES—ALL MOTIONS NECESSARY TO CHECK SURFACE,FIRST INCH ENDS—WITH GAUGE IN POSITION TO PLACE ASIDE
FFD	U	MAA	BITDU02	BITIU02	10	INDICATOR(DIAL),USE TO CHECK HEIGHT ON FLAT SURFACE STARTS—WITH GAUGE IN POSITION TO MAKE CHECK INCLUDES—ALL MOTIONS NECESSARY TO CHECK ADDITIONAL ONE INCH ON SURFACE ENDS—WITH GAUGE IN POSITION TO PLACE ASIDE
FFH	U	MAA	BITMR01	BITMR01	95	INDICATOR(DIAL),USE TO CHECK MANDREL RUNOUT PER DIAMETER STARTS—WITH GAUGE POSITIONED TO DIAMETER AND HAND ON PART INCLUDES—ALL MOTIONS NECESSARY TO TURN PART TO CHECK RUN OUT OF ONE DIAMETER ENDS—WITH HAND ON PART

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	2589	BITMUXX	VARIABLE	MICROMETER,USE,READ SCALE STARTS—WITH MICROMETER IN HAND INCLUDES—ALL THE EYE MOTIONS(TRAVEL AND FOCUS) NECESSARY TO READ SCALE ENDS—WHEN READING IS MADE
					560	CASE 01 VERNIER BEVEL PROTRACTOR
					252	02 MICROMETER TO .001
FFD	U	MAA	BITMS01	BITMU03	140	MICROMETER,USE,CHANGE POSITION OF THIMBLE FOR MAKING CHECK OF SIZE DIFFERENT FROM PRIOR CHECK STARTS—WITH MICROMETER IN HAND INCLUDES—ALL MOTIONS NECESSARY TO SCREW THIMBLE DOWN 14 TURNS,PLACE TO PART,AND MAKE TWO ADDITIONAL TURNS ENDS—WITH MICROMETER OVER PART,READY TO MAKE FINAL ADJUSTMENT CONDITION—APPLICABLE TO OUTSIDE,INSIDE,OR DEPTH MICROMETER UP TO 6 INCH CAPACITY
FFD	U	MAA	BITMU01	BITMU04	22	MICROMETER,USE TO CHECK PART AFTER CHANGE SETTING,BIT-MU-03 STARTS—WITH MICROMETER IN POSITION FOR CHECK INCLUDES—ALL MOTIONS NECESSARY TO ADJUST MICROMETER TO PART,MOVE OFF PART,AND MOVE INTO POSITION FOR READING ENDS—WITH MICROMETER IN HAND CONDITION—APPLICABLE TO OUTSIDE,INSIDE,OR DEPTH MICROMETER UP TO 6-INCH CAPACITY
FFD	U	MAA	BITMU02	BITMU05	74	MICROMETER,USE,TO CHECK PART(CHANGE SETTING,BIT-MU-03,NOT NECESSARY) STARTS—WITH MICROMETER IN PLACE(APPROXIMATE) READY TO POSITION INCLUDES—ALL MOTIONS NECESSARY TO POSITION MICROMETER ON PART,SET,AND MOVE INTO POSITION FOR READING ENDS—WITH MICROMETER IN HAND CONDITION—APPLICABLE TO OUTSIDE,INSIDE,OR DEPTH MICROMETER UP TO 6-INCH CAPACITY
FFH	U	MAA	BITPG01	BITPG01	31	GAUGE(PLUG),CHECK HOLE FOR SIZE ONLY WITH GO END STARTS—WITH GAUGE IN HAND AT PART INCLUDES—ALL MOTIONS NECESSARY TO INSERT GAUGE CHECK SIZE OF HOLE,AND REMOVE GAUGE ENDS—WITH GAUGE IN HAND
FFH	U	MAA	BITPG02	BITPG02	27	GAUGE(PLUG),CHECK HOLE FOR SIZE ONLY WITH NO GO END STARTS—WITH GAUGE IN HAND AT PART INCLUDES—ALL MOTIONS NECESSARY TO POSITION GAUGE TO HOLE AND DETERMINE IT CANNOT BE INSERTED ENDS—WITH GAUGE IN HAND
FFH	U	MAA	BITPG03	BITPG03	34	GAUGE(PLUG),CHECK FOR SIZE AND DEPTH STARTS—WITH GAUGE IN HAND AT PART INCLUDES—ALL MOTIONS NECESSARY TO INSERT GAUGE,CHECK SIZE AND DEPTH AND REMOVE GAUGE ENDS—WITH GAUGE IN HAND

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAJ	U	MAA	MITEVXX	BITREXX	VARIABLE	ROD,EXAMINE VISUALLY WITH NAKED EYE STARTS-WITH OBJECT IN POSITION, READY FOR EXAMINATION INCLUDES-ALL MOTIONS NECESSARY TO VISUALLY EXAMINE SURFACE CONDITION OF THE OBJECT ENDS-WITH DETERMINATION OF SURFACE CONDITION CONDITIONS-APPLIES TO OTHER SIMILAR OBJECTS SUCH AS SCREWS AND STUDS.APPLIES ONLY TO YES/NO TYPE EVALUATION NOT REQUIRING PROLONGED MENTAL CONSIDERATION WHICH WOULD LIMIT OUT EYE FOCUS AND EYE TRAVEL.DOES NOT INCLUDE GET, PLACE OR LAY ASIDE OBJECT.
					42	CASE 01 UP TO 1 INCH LENGTH
					58	02 1 TO 3 INCH LENGTH
					76	03 3 TO 5 INCH LENGTH
					94	04 5 TO 7 INCH LENGTH
					114	05 7 TO 10 INCH LENGTH
FFH	U	MAA	BITSN01	BITSN01	26	GAUGE(SNAP),USE TO CHECK DIAMETER OF PART STARTS-WITH GAUGE IN HAND AT PART INCLUDES-ALL MOTIONS NECESSARY TO CHECK PART, PER POSITION OR SPOT ENDS-WITH GAUGE IN CONTACT WITH PART
MAJ	U	MAA	MITEVXX	BITWEXX	VARIABLE	WIRE,EXAMINE VISUALLY,SAFETY,TWISTED STARTS-WITH OBJECT IN POSITION READY FOR EXAMINATION INCLUDES-ALL MOTIONS NECESSARY TO VISUALLY EXAMINE THE SAFETY WIRE ENDS-WITH DETERMINATION OF SAFETY WIRE CONDITION CONDITIONS-APPLIES ONLY TO YES/NO TYPE EVALUATION NOT REQUIRING PROLONGED MENTAL CONSIDERATION WHICH WOULD LIMIT OUT EYE FOCUS AND EYE TRAVEL.DOES NOT INCLUDE GET,PLACE,OR LAY ASIDE OBJECT
					31	CASE 01 UP TO 1 INCH LENGTH
					39	02 1 TO 3 INCH LENGTH
					47	03 3 TU 5 INCH LENGTH
					55	04 5 TO 7 INCH LENGTH
					63	05 7 TO 10 INCH LENGTH
FF	U	MAA	CVMBC01	MITBC01	561	BATTERY,CHECK WATER LEVEL,12 VOLT WATER TYPE BATTERY WITH SIX CELLS STARTS-WITH REACH TO FIRST CELL CAP INCLUDES-ALL MOTIONS NECESSARY TO REMOVE EACH OF SIX CAPS,OBSERVE WATER LEVEL,AND REPLACE CAPS ENDS-WITH RELEASE OF LAST CAP CONDITIONS-APPLICABLE TO BATTERY WITH INDIVIDUAL PULL-UP CAPS.SERVICING BATTERY NOT INCLUDED
NAA	U	TUA	OACCM13	MITCA01	165	CONTROL,ADJUST AND OBTAIN DIAL READING STARTS-WITH REACH TO CONTROL INCLUDES-ALL THE MOTIONS NECESSARY TO ADJUST KNOB,OBTAIN A READING AND READ ENDS-WITH RELEASE CONTROL CONDITIONS-INCLUDES DELAY WHILE INDICATOR ATTAINS POSITION TO BE READ
FFD	U	MAA	KERKSA9	MITCA02	79	CONTROL,ADJUST KNOB/DIAL AND READ STARTS-WITH REACH TO KNOB INCLUDES-ALL THE MOTIONS NECESSARY TO GRASP AND TURN KNOB/DIAL TO EXACT SETTING,EYES TRAVEL TO AND FOCUS TO READ,ADJUST KNOB,HAND ASIDE ENDS-WITH HAND ASIDE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

FFD	U	MAA	KERKSB1	MITCA03	209	CONTROL,ADJUST WITH SCREWDRIVER,READ OSCILLOSCOPE
						STARTS—WITH REACH TO OBTAIN SCREWDRIVER
						INCLUDES—ALL THE MOTIONS NECESSARY TO ADJUST
						   CONTROL WITH SCREWDRIVER AND READ OSCILLOSCOPE
						ENDS—WITH ASIDE SCREWDRIVER
						CONDITIONS—APPLICABLE TO ADJUSTING POTENTI-
						   OMETER,SLUG CAPACITOR,OR SIMILAR

FFD	U	MAA	KERKSB3	MITCA04	161	CONTROL,ADJUST,ZERO METER WITH TOOL
						STARTS—WITH REACH TO TOOL
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET
						   SCREWDRIVER OR SPECIAL TOOL,SET METER POINTER
						   TO ZERO,READ METER
						ENDS—WITH SCREWDRIVER/TOOL ASIDE

NAA	U	MAA	OGMGTXX	MITGUXX	VARIABLE	GAUGE(TELESCOPE AND OUTSIDE MICROMETER),USE
						STARTS—WITH REACH TO TELESCOPE GAUGE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET,
						   COLLAPSE,INSERT,RELEASE TO SURFACE,LOCK AND
						   REMOVE GAUGE,GET OUTSIDE MICROMETER,ADJUST TO
						   TELESCOPE GAUGE,READ DIMENSION AND ASIDE
						   GAUGE AND MICROMETER.EACH ADDITIONAL GAUGING
						   INCLUDES COLLAPSING THE GAUGE,INSERTING IN
						   OPENING,LOCKING,REMOVING AND MAKING A READING
						   WITH A MICROMETER
						ENDS—WITH ASIDE OF GAUGE AND/OR MICROMETER
						CONDITIONS—READ TO .0001 INCH

					1074	CASE 01 FIRST GAUGING
					718	02 ADDITIONAL GAUGING

NF	U	MAF	3790	MITGU03	1100	GAUGE(HEIGHT GAUGE),USE
						STARTS—WITH REACH TO GAUGE
						INCLUDES—ALL THE MOTIONS NECESSARY TO OBTAIN
						   GAUGE,PREPARE TABLE FOR USE,SET/ADJUST GAUGE,
						   MOVE TO JOB,CHECK FEEL,MOVE GAUGE FROM JOB,AND
						   READ
						ENDS—WITH GAUGE IN HAND
						CONDITIONS—GAUGE ONE DIMENSION
						   INCLUDES READING (BIT-MU-01)

NF	U	MAF	3796	MITGU04	889	GAUGE(DEPTH VERNIER),USE
						STARTS—WITH VERNIER IN HAND
						INCLUDES—ALL THE MOTIONS NECESSARY TO
						   POSITION VERNIER TO WORK,ADJUST,LOCK,MOVE
						   FROM WORK,AND READ
						ENDS—WITH VERNIER IN HAND
						CONDITIONS—MEASURE ONE DIMENSION ONLY
						   INCLUDES READING (BIT-MU-01)

FFE	U	MAA	GITMCA7	MITGU05	126	GAUGE(PLUG GAUGE,GO/NO GO),USE
						STARTS—WITH REACH TO PART
						INCLUDES—ALL THE MOTIONS NECESSARY TO OBTAIN
						   AND POSITION PART,OBTAIN PLUG GAUGE AND MAKE
						   CHECKS WITH BOTH GO AND NO GO ENDS
						ENDS—WITH ASIDE GAUGE
						CONDITIONS—GAUGE PARTS UP TO 30 POUNDS

FF	U	MAA	GITMCB1	MITGU06	205	GAUGE(FEELER),USE,GAUGE CLEARANCE OR END PLAY
						STARTS—WITH REACH TO GET GAUGE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET A
						   FEELER GAUGE,SELECT LEAF AND CHECK END PLAY OR
						   CLEARANCE
						ENDS—WITH GAUGE ASIDE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MO	U	MAO	LM1J3	MITIA01	182	INDICATOR,ADJUST TO WORK,MAGNETIC BASE INDICATOR STARTS-WITH REACH TO INDICATOR BASE INCLUDES-ALL MOTIONS NECESSARY TO MOVE BASE TO SURFACE,HOLD BASE,MOVE BASE ARM TO CORRECT POSITION,HOLD BASE ARM,LOOSEN SCREW ON INDICATOR ARM,ADJUST ARM TO CORRECT POSITION, HOLD ARM,AND TIGHTEN SCREW ENDS-WITH SIMO RELEASE OF SCREW AND ARM
NF	U	MAF	4063	MITIS01	62	INDICATOR(DIAL),SET STARTS-WITH REACH TO DIAL INCLUDES-ALL THE MOTIONS NECESSARY TO SET AN INDICATOR DIAL BY MOVING DIAL BY HAND ENDS-WITH RELEASE OF DIAL
MAA	U	MAA	OGMMDXX	MITMMXX	VARIABLE	MICROMETER,MEASURE DEPTH STARTS-WITH REACH TO MICROMETER INCLUDES-ALL THE MOTIONS NECESSARY TO ADJUST MICROMETER TO SURFACE AND READ FIRST DIMENSION (CASE 01). ALSO INCLUDES THE MOTIONS NECESSARY TO MAKE EACH ADDITIONAL MEASUREMENT OF SIMILAR OBJECT(CASE 02) ENDS-WITH ASIDE MICROMETER(CASE 01) OR WITH READ MICROMETER(CASE 02)-MEASURE TO SIX INCHES CONDITIONS-TIME FOR CHANGING MANDREL ONCE FOR EACH TEN OCCURENCES OF CASE 01 INCLUDED. READ TO .0001 INCH
					455	CASE 01 FIRST MEASUREMENT
					182	02 EACH ADDITIONAL MEASUREMENT
NF	U	MAF	3782	MITMUXX	VARIABLE	MICROMETER,USE STARTS-WITH A REACH TO OBTAIN THE MICROMETER INCLUDES-ALL THE MOTIONS NECESSARY TO OBTAIN AND USE A MICROMETER ENDS-WITH MICROMETER IN HAND READY TO READ CONDITIONS-DOES NOT INCLUDE READ-FOR GAUGING ONE DIMENSION ONLY
					229	CASE 01 OUTSIDE MICROMETER-DIMENSION UP TO FOUR INCHES
					286	02 OUTSIDE MICROMETER-DIMENSION FOUR TO 12 INCHES
					458	03 OUTSIDE MICROMETER-DIMENSION OVER 12 INCHES
FFE	U	MAA	GITMC41	MITMU04	427	MICROMETER,USE-CHECK OBJECTS OF DIFFERENT SIZE STARTS-WITH MICROMETER IN HAND INCLUDES-ALL THE MOTIONS NECESSARY TO MEASURE INSIDE OR OUTSIDE DIAMETER IN THREE POSITIONS ON EACH SURFACE ENDS-WITH MICROMETER IN HAND CONDITIONS-APPLICABLE FOR MICROMETERS UP TO SIX INCHES-DOES NOT INCLUDE READING
.FFE	U	MAA	GITMCA2	MITMU05	380	MICROMETER,USE-CHECK OBJECTS OF SAME SIZE STARTS-WITH MICROMETER IN HAND INCLUDES-ALL THE MOTIONS NECESSARY TO MEASURE INSIDE OR OUTSIDE DIAMETER IN THREE POSITIONS ON EACH SURFACE ENDS-WITH MICROMETER IN HAND CONDITIONS-APPLICABLE FOR MICROMETERS UP TO SIX INCHES-DOES NOT INCLUDE READING
NF	U	MAF	1020	MITMU06	343	MICROMETER,USE(REMOVE AND REPLACE EXTENSION ON INSIDE MICROMETER) STARTS-WITH MICROMETER IN HAND INCLUDES-ALL THE MOTIONS NECESSARY TO REMOVE ONE EXTENSION,PLACE IN CASE,GET REPLACEMENT EXTENSION,ATTACH TO MICROMETER AND SECURE ENDS-WITH MICROMETER IN HAND

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	KITIMA1	MITMU07	265	MICROMETER,USE,CHECK INSIDE DIAMETER OR BETWEEN TWO SURFACES STARTS—WITH INSIDE MICROMETER IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO GET SPINDLE WITH FINGERS,RUN DOWN SPINDLE,PLACE BETWEEN SURFACES,RUN UP SPINDLE,MOVE TO CHECK FOR CONTACT,MAKE MINUTE ADJUSTMENT ENDS—WITH FINAL ADJUSTMENT MADE,MICROMETER IN HAND AND IN CONTACT WITH PART CONDITIONS—DOES NOT INCLUDE READING TIME. MEASURE ONE SPOT ONLY.
AE	U	MAN	FMGGS03	MITMM01	185	WIRE,MEASURE FOR GAGE STARTS—WITH WIRE GAUGE IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE THE WIRE GAUGE TO WIRE,POSITION GAUGE TO WIRE,MOVE BACK AND FORTH TO CHECK,CHECK WITH TWO ADDITIONAL GAUGES,READ GAUGE TO DETERMINE WIRE GAGE,MOVE GAUGE AWAY FROM WIRE ENDS—WITH GAUGE CLEAR OF WIRE
FFH	U	MAA	TITEAXX	TITETXX	TABLE	EYE,TRAVEL FROM POINT TO POINT TO INSPECT STARTS—AFTER EYES HAVE SHIFTED TO FIRST POINT TO BE INSPECTED INCLUDES—ONE EYE FOCUS PER POINT INSPECTED PLUS EYE TRAVEL BETWEEN POINTS ENDS—WHEN EYES ARE READY TO SHIFT TO A NEW INSPECTION AREA OR AWAY

	DISTANCE BETWEEN POINTS(INCHES)							
NUMBER OF POINTS	1 A	2 B	4 C	6 D	10 E	14 F	18 G	20 H
1 A	6	9	11	13	17	21	25	27
2 B	15	16	18	20	24	28	32	34
3 C	23	25	29	33	41	49	57	61
4 D	31	34	40	46	58	70	82	88
5 E	39	43	51	59	75	91	107	115
6 F	47	52	62	72	92	112	132	142
7 G	55	61	73	85	109	133	157	169
8 H	63	70	84	98	126	154	182	196
9 J	71	79	95	111	143	175	207	223
10 K	79	88	106	124	160	196	232	250

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	OBMGFXX	TITGUXX	TABLE	GAUGE(FEELER WITH LOCKNUT),USE STARTS—WITH REACH TO FEELER GAUGE INCLUDES—ALL THE MOTIONS NECESSARY TO GET GAUGE,LOOSEN LOCKNUT,SPREAD LEAVES,SELECT LEAF FOLD REMIANDER IN CASE,INSERT LEAF IN OPENING, CHECK CLEARANCE,OBTAIN RAG AND CLEAN GAUGE WHEN NECESSARY,FOLD LEAF USED INTO CASE ENDS—WITH LAY ASIDE FEELER GAUGE OR WITH GAUGE IN HAND AFTER ADDITIONAL GAUGING

CONDITION OF OBJECT	GAUGE FIRST OBJECT	ADDITIONAL OBJECT—SAME LEAF	ADDITIONAL MEASURE—SAME OBJECT—DIFF. LEAF
	A	B	C
CLEAN,DRY A	432	123	294
DIRTY,OILY B	521	212	383

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	OGMMOXX	TITMMXX	TABLE	MICROMETER(OUTSIDE),MEASURE DIMENSION AND READ

STARTS-WITH REACH TO MICROMETER(FIRST MEASURE)
OR REPOSITION MICROMETER OR OBJECT(ADDITIONAL
MEASUREMENTS)
INCLUDES-ALL THE MOTIONS NECESSARY TO OPEN THE
MICROMETER,SELECT OBJECT TO BE MEASURED,ADJUST
MICROMETER TO SURFACE AND READ MICROMETER FOR
FIRST MEASUREMENT AND FOR ADDITIONAL MEASURE-
MENTS OF SAME OR SIMILAR OBJECTS WHEN REQUIRED
ENDS-WITH MICROMETER ASIDE
CONDITIONS-READ TO .0001 INCH

SURFACE CONDITION AND DIMENSIONS		FIRST MEASURE A	ADDITIONAL MEASUREMENT B
FLAT-UP TO 3 INCHES	A	530	158
CYLINDRICAL-UP TO FIVE INCHES	B	642	225

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAJ	U	MAA	MITEVXX	TITOEXX	TABLE	OBJECT,EXAMINE SURFACE CONDITION VISUALLY WITH NAKED EYE

STARTS-WITH OBJECT IN POSITION READY FOR
EXAMINATION
INCLUDES-ALL MOTIONS NECESSARY TO VISUALLY
EXAMINE THE OBJECT FOR SURFACE CONDITION
ENDS-WITH DETERMINATION OF SURFACE CONDITION
CONDITIONS-APPLIES ONLY TO YES/NO TYPE
EVALUATION NOT REQUIRING PROLONGED MENTAL
CONSIDERATION WHICH WOULD LIMIT OUT EYE FOCUS
AND EYE TRAVEL.DOES NOT INCLUDE GET,PLACE,OR
LAY ASIDE OBJECT.

		OBJECT DIMENSION (INCHES)		
TYPE OF OBJECT		1/4X1/4X1/4 - 1X1X1 A	1X1X1- 3X3X3 B	3X3X3- 5X5X5 C
FLAT,1 SIDE	A	15	47	63
FLAT,2 SIDES	B	38	70	117
CUBE,6 SIDES	C	82	178	258
CUBE,HOLLOW, 1 CAVITY	D	106	210	298
CUBE,HOLLOW, 2 CAVITIES	E	130	242	338
CYLINDER,HOLLOW	F	130	242	338
CYLINDER,SOLID	G	109	114	152
CYLINDER,CORED, 1 CAVITY	H	141	146	182
CYLINDER,CORED, 2 CAVITIES	J	165	170	214

		OBJECT DIMENSION (INCHES)	
TYPE OF OBJECT		5X5X5- 7X7X7 D	7X7X7- 10X10X10 E
FLAT,1 SIDE	A	79	95
FLAT,2 SIDES	B	149	181
CUBE,6 SIDES	C	342	466
CUBE,HOLLOW, 1 CAVITY	D	392	516
CUBE,HOLLOW, 2 CAVITIES	E	442	566
CYLINDER,HOLLOW	F	442	566
CYLINDER,SOLID	G	182	218
CYLINDER,CORED, 1 CAVITY	H	220	267
CYLINDER,CORED, 2 CAVITIES	J	250	303

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	MAA	OGNGPXX	TITUGXX	TABLE	GAUGE(PLUG),USE

GAUGE(PLUG),USE
STARTS-WITH REACH TO GAUGE OR GAUGE CONTAINER
INCLUDES-ALL THE MOTIONS NECESSARY TO OPEN
CONTAINER OR REMOVE PROTECTIVE END CAPS,OBTAIN
OBJECT TO BE GAUGED OR PLACE GAUGE TO HOLE AND
GAUGE HOLE-ALSO INCLUDES MOTIONS TO GAUGE
ADDITIONAL HOLE IN SAME OBJECT,OR OBTAIN AN
ADDITIONAL OBJECT,PLACE GAUGE,GAUGE HOLE
ENDS-WITH LAY ASIDE OBJECT AND/OR GAUGE

TYPE OF GAUGE	FIRST GAUGE	ADDITIONAL GAUGES
	A	B
PROGRESSIVE CYLINDRICAL GAUGE	A 290	95
PLAIN CYLINDRICAL GAUGE	B 409	126
WEAR AND PLAIN CYLINDRICAL GAUGE (COMBINATION)	C 453	175
WEAR GAUGE	D 466	196

| FFD | U | MAA | KITHPAA | SITAIXX | VARIABLE | AREA,INSPECT WITH LIGHT |

AREA,INSPECT WITH LIGHT
STARTS-WITH REACH TO GET LIGHT
INCLUDES-ALL THE MOTIONS NECESSARY TO GET AND
TURN ON LIGHT WITH A SLIDE OR BUTTON TYPE
SWITCH,PLACE LIGHT TO EXACT AREA,MOVE LIGHT
FOUR TIMES TO INSPECT,TURN OFF AND ASIDE LIGHT
ENDS-WITH ASIDE LIGHT
184   CASE 01 INSPECT FIRST OR ONLY 16-SQUARE INCH AREA
91   02 INSPECT EACH ADDITIONAL 16-SQUARE INCH AREA

| FFE | U | MAA | GITMCAX | SITMUXX | VARIABLE | MICROMETER(DEPTH),USE WITH PARALLEL BARS |

MICROMETER(DEPTH),USE WITH PARALLEL BARS
STARTS-WITH REACH TO PARALLEL BARS
INCLUDES-ALL MOTIONS NECESSARY TO GET BARS,
POSITION TO PART,GET DEPTH MICROMETER,ADJUST
TO SURFACE,READ MICROMETER,ASIDE MICROMETER,
AND ASIDE PARALLEL BARS
ENDS-WITH RELEASE OF PARALLEL BARS
CONDITIONS-APPLICABLE TO MICROMETER TO SIX-INCH CAPACITY
635   CASE 01 MEASURE FIRST DEPTH
342   02 MEASURE EACH ADDITIONAL DEPTH ON SAME PART(INCLUDES REPOSITION PARALLEL BARS)

| FFF | U | MAA | MJPCAXX | MJPAPXX | VARIABLE | APRON,PUT ON AND REMOVE |

APRON,PUT ON AND REMOVE
STARTS-WITH REACH TO APRON
INCLUDES-ALL MOTIONS NECESSARY TO GET APRON
AND ORIENT;GET NECK BAND,PLACE ABOUT NECK,AND
ADJUST;GET WAIST STRINGS AND SECURE;GET WAIST
STRINGS AND UNFASTEN;AND REMOVE NECK BAND AND
ASIDE APRON
ENDS-WITH PLACE APRON ASIDE
CONDITIONS-APRON IS WITHIN EASY REACH
601   CASE 01 APRON,TIE-STRING TYPE FASTENER
368   02 APRON,HOOK AND EYE TYPE FASTENER

| AE | U | MAM | BTHEAS1 | MJP8I01 | 170 | BAR(LOCKING),INSTALL AND REMOVE,TOOL CABINET OR SIMILAR |

BAR(LOCKING),INSTALL AND REMOVE,TOOL CABINET OR SIMILAR
STARTS-WITH REACH TO LOCKING BAR
INCLUDES-ALL MOTIONS NECESSARY TO GET,REMOVE
AND ASIDE BAR;AND TO GET BAR,POSITION TO
BRACKET,AND INSERT IN BRACKET
ENDS-WITH RELEASE OF BAR
CONDITION-THIS ELEMENT INCLUDES MOVING BAR
30 INCHES IN AND OUT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	2195	MJPCCXX	VARIABLE	CORD(ELECTRIC),CONNECT AND DISCONNECT STARTS—WITH A REACH TO ELECTRIC PLUG INCLUDES—ALL THE MOTIONS NECESSARY TO OBTAIN AN ELECTRIC PLUG AND INSERT INTO A RECEPTACLE OR EXTENSION CORD,AND TO REMOVE PLUG AND PLACE ON RACK ENDS—WITH RELEASE OF CORD AFTER PLACING ON RACK
					102	CASE 01 AT WORK BENCH LEVEL—NO STOOPING REQUIRED
					224	02 AT BASEBOARD LEVEL—STOOP OR BEND REQUIRED
FFD	U	MAA	KALEA24	MJPCI01	127	COMPONENT(BAYONET TYPE),INSTALL STARTS—WITH REACH TO GET COMPONENT INCLUDES—ALL THE MOTIONS NECESSARY TO GET COMPONENT AND MOVE TO SOCKET,MOVE COMPONENT TO SPRING,DEPRESS SPRING AND SEAT COMPONENT, ENGAGE PIN IN SLOTS,TURN COMPONENT TO LOCK IN PLACE,RELEASE COMPONENT ENDS—WITH PLUG IN PLACE AND RELEASED CONDITIONS—APPLICABLE TO LAMP,FUSE HOLDER CAP, ETC., WITH BAYONET BASE.
NF	U	MAF	3385	MJPCD01	73	COMPARTMENT(TOOL),OPEN OR CLOSE MOUNTED ON TRUCK OR SIMILAR STARTS—WITH REACH TO COMPARTMENT DOOR INCLUDES—ALL MOTIONS NECESSARY TO UNLATCH AND OPEN DOOR OR GET DOOR,CLOSE,AND FASTEN LATCHES ENDS—WITH RELEASE OF DOOR
DL	U	MAL	SMVD	MJPCO02	102	COMPARTMENT(DASH),OPEN AND CLOSE STARTS—WITH A REACH TO THE HANDLE INCLUDES—ALL THE TIME NECESSARY TO OPEN AND CLOSE THE DOOR OF THE DASH COMPARTMENT OF A VEHICLE ENDS—WITH RELEASE OF HANDLE,DOOR CLOSED
FFF	U	MAA	MJPCC01	MJPCP01	1145	COVERALLS,PUT ON AND REMOVE STARTS—WITH COVERALLS UNDER CONTROL INCLUDES—ALL MOTIONS NECESSARY TO PUT ON AND REMOVE COVERALLS ENDS—WITH COVERALLS IN HAND READY TO BE PLACED ASIDE CONDITION—DOES NOT INCLUDE TIME TO FASTEN OR UNFASTEN
FFD	U	MAA	KALED24	MJPCR01	69	COMPONENT(BAYONET TYPE),REMOVE STARTS—WITH REACH TO COMPONENT INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP COMPONENT AND TWIST TO UNLOCK,DISENGAGE FROM SOCKET AND PLACE ASIDE ENDS—WITH COMPONENT ASIDE CONDITIONS—APPLICABLE TO LAMP,FUSE HOLDER CAP, ETC., WITH BAYONET BASE.
NF	U	MAF	957	MJPCU01	1186	CORD(ELECTRIC EXTENSION),UNCOIL,CONNECT, DISCONNECT AND COIL STARTS—WITH A STOOP TO COILED CORD INCLUDES—ALL THE MOTIONS NECESSARY TO UNCOIL A 25 FOOT CORD,WALK TO OUTLET,INSERT PLUG IN OUTLET,RETURN TO WORK AREA,TURN AND WALK TO OUTLET WITH PLUG INSERTED,STOOP,REMOVE PLUG, RECOIL CORD,ASIDE COIL TO FLOOR AND STAND AFTER BEND TO PLACE COILED CORD ON FLOOR ENDS—WITH STAND CONDITIONS—WALK 10 PACES TO AND FROM OUTLET TO CONNECT AND DISCONNECT. UNCOIL AND COIL CORD WHILE WALKING

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	MJPSCXX	MJPDCXX	VARIABLE	DOOR(CABINET),CLOSE AND OPEN,SWING OR SLIDE STARTS—WITH REACH TO DOOR HANDLE,KEY,OR LATCH INCLUDES—ALL MOTIONS NECESSARY TO UNLOCK AND/ OR OPEN AND TO CLOSE AND/OR LOCK DOOR ENDS—WITH RELEASE OF DOOR AND ASIDE KEY
					76	CASE 01 DOOR WITHOUT LATCH OR LOCK
					302	02 DOOR,WITH MOUNTED LOCK—OPEN AND SECURE LOCK,OPEN AND CLOSE DOOR
					166	03 DOOR,WITH HASP,NOT LOCKED
					414	04 DOOR,WITH HASP AND PADLOCK—OPEN AND CLOSE LOCK,OPEN AND CLOSE DOOR
NF	U	MAF	2159	MJPDC05	276	DOOR(CABINET),CLOSE AND OPEN,UNLOCK AND LOCK STARTS—WITH MOVE KEY TO LOCK INCLUDES—ALL MOTIONS NECESSARY TO UNLOCK,OPEN, CLOSE,AND LOCK CABINET DOOR ENDS—WITH RELEASE OF LOCK
MAA	U	MAA	MJPDOXX	MJPDC06	128	DOOR(CABINET),CLOSE AND OPEN,SINGLE OR DOUBLE WITH LOCKING HANDLE OR KNOB STARTS—WITH REACH TO DOOR INCLUDES—UNLATCH AND OPEN DOOR(S),REACH TO DOOR(S),CLOSE AND LATCH ENDS—WITH DOOR(S) CLOSED AND LATCHED CONDITIONS—APPLIES TO DOOR(S) WITH NON-KEY LOCKING DEVICES IN ONE DOOR
NO	U	MAO	LATL2L	MJPDC07	349	DOOR(CABINET),CLOSE AND OPEN,SECURED WITH PIN LATCH STARTS—WITH SIMO REACH TO DOOR AND PIN INCLUDES—ALL MOTIONS NECESSARY TO PRESS ON DOOR WITH RIGHT HAND,REMOVE PIN FROM LATCH WITH LEFT HAND,PARTIALLY OPEN LEFT HAND DOOR, PARTIALLY OPEN RIGHT HAND DOOR,RELEASE LEFT HAND DOOR,SIDESTEP TO FULLY OPEN RIGHT HAND DOOR,TURN,GET LEFT HAND DOOR,OPEN LEFT HAND DOOR FULLY,ASIDE PIN TO CABINET SHELF;GET PIN FROM SHELF,REACH TO LEFT HAND DOOR,CLOSE PARTIALLY,GET RIGHT HAND DOOR,CLOSE BOTH DOORS COMPLETELY(SIMO),AND INSERT PIN IN LATCH ENDS—WITH SIMO RELEASE OF DOOR AND PIN CONDITIONS—APPLICABLE TO DOUBLE DOOR CABINET THREE TO FIVE FEET WIDE
FFF	U	MAA	MJPSOXX	MJPDOXX	VARIABLE	DRAWER(STORAGE),OPEN AND CLOSE STARTS—WITH GET DRAWER HANDLE,HASP,OR KEY INCLUDES—ALL MOTIONS NECESSARY TO OPEN AND CLOSE STORAGE DRAWER ENDS—WITH DRAWER CLOSED AND LOCKED IF NECESSARY CONDITION—CASE 01-04 APPLY TO DRAWERS WITH UP TO 10 POUNDS ENW RESISTANCE.CASE 05-08 APPLY TO DRAWERS WITH 10-20 POUNDS ENW RESISTANCE
					66	CASE 01 UNLOCKED DRAWER WITH NO LATCH
					292	02 LOCKED DRAWER WITH MOUNTED LOCK
					134	03 DRAWER WITH HASP (DOES NOT INCLUDE UNLOCK,REMOVE,ATTACH,AND LOCK PADLOCK)
					382	04 DRAWER WITH HASP (INCLUDES UNLOCK, REMOVE,ATTACH,AND LOCK PADLOCK)
					76	05 UNLOCKED DRAWER WITH NO LATCH
					302	06 LOCKED DRAWER WITH MOUNTED LOCK
					144	07 DRAWER WITH HASP (DOES NOT INCLUDE UNLOCK,REMOVE,ATTACH,AND LOCK PADLOCK)
					392	08 DRAWER WITH HASP (INCLUDES UNLOCK, REMOVE,ATTACH,AND LOCK PADLOCK)

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
AF	U	NAA	12ARAQ	MJPO009	30	DRAWER(TOOL BOX),OPEN AND CLOSE STARTS-WITH REACH TO DRAWER INCLUDES-ALL THE MOTIONS NECESSARY TO REACH AND GRASP DRAWER,SLIDE DRAWER OPEN,REGRASP DRAWER,CLOSE DRAWER,RELEASE DRAWER ENDS-WITH RELEASE CLOSED DRAWER CONDITIONS-DRAWER OPENED APPROXIMATELY FOUR INCHES.DOES NOT INCLUDE TIME TO REMOVE OBJECT FROM DRAWER.
FFF	U	NAA	MJPCM01	MJPEP01	131	EARMUFFS,PUT ON AND REMOVE STARTS-WITH GET EARMUFFS INCLUDES-ALL MOTIONS NECESSARY TO PUT ON AND REMOVE EARMUFFS ENDS-WITH PLACE EARMUFFS ASIDE CONDITION-EARMUFFS ARE WITHIN EASY REACH
FFF	U	NAA	MJPCEXX	MJPGGXX	VARIABLE	GLASSES,GOGGLES,OR SHIELD,PUT ON AND REMOVE STARTS-WITH GET GOGGLES,GLASSES,OR SHIELD INCLUDES-ALL MOTIONS NECESSARY TO PUT ON AND REMOVE VARIOUS EYE PROTECTIVE DEVICES ENDS-WITH PLACE DEVICE ASIDE CONDITION-DEVICE IS WITHIN EASY REACH
					183	CASE 01 GOGGLES
					190	02 SAFETY GLASSES(NOT IN CASE)
					129	03 SAFETY SHIELD
DNA	U	NAA	OJPGS02	MJPGG04	477	GLASSES,REMOVE FROM CASE,PUT ON,REMOVE,AND RETURN TO CASE STARTS-WITH REACH TO CASE INCLUDES-ALL MOTIONS NECESSARY TO GET CASE, OPEN CASE(SPRING TENSION LID),REMOVE GLASSES FROM CASE,CLOSE CASE,ASIDE CASE,UNFOLD GLASSES,PLACE GLASSES ON FACE,REMOVE GLASSES FROM FACE,FOLD GLASSES,GET CASE,OPEN CASE,PUT GLASSES IN CASE,CLOSE CASE,AND ASIDE CASE ENDS-WITH RELEASE OF CASE CONDITIONS-APPLICABLE TO SAFETY EYEGLASSES OR SIMILAR STORED IN CASE WITH SPRING TENSION LID.DOES NOT INCLUDE TIME TO CLEAN GLASSES.
FFE	U	NAA	GITHPA2	MJPGM01	152	GLASS(ILLUMINATED MAGNIFYING),MOVE INTO POSITION AND MOVE ASIDE STARTS-WITH REACH TO MAGNIFYING GLASS INCLUDES-ALL MOTIONS NECESSARY TO MOVE GLASS OVER SURFACE TO BE EXAMINED,TURN ON LIGHT,TURN OFF LIGHT,AND MOVE GLASS ASIDE ENDS-WITH RELEASE OF GLASS CONDITIONS-GLASS IS MOUNTED ON BENCH
FFF	U	NAA	MJPCGXX	MJPGPXX	VARIABLE	GLOVES,PUT ON AND REMOVE STARTS-WITH GET GLOVES INCLUDES-ALL MOTIONS NECESSARY TO PUT ON AND REMOVE A PAIR OF GLOVES ENDS-WITH PLACE GLOVES ASIDE CONDITIONS-GLOVES ARE WITHIN EASY REACH
					256	CASE 01 ASBESTOS OR RUBBER GLOVES,LOOSE FIT
					428	02 RUBBER GLOVES,CLOSE FIT
					320	03 WORK GLOVES,CLOTH,LEATHER,OR SIMILAR
NAA	U	NAA	SPAGR01	MJPGR01	230	GUN(SPRAY),REPLACE STARTS-WITH REACH TO GET REPLACEMENT GUN INCLUDES-ALL THE MOTIONS NECESSARY TO PICK UP REPLACEMENT GUN,REACH TO AIR HOSE CONNECTOR ATTACHED TO SPRAY GUN HANGING ON HOOK,PUSH AND TURN CONNECTOR TO DISENGAGE FROM GUN, POSITION HOSE CONNECTOR TO OTHER SPRAY GUN, AND TURN AND PUSH CONNECTOR TO LOCK ON GUN. ENDS-WITH REPLACEMENT GUN WITH HOSE CONNECTED IN HAND CONDITIONS-DOES NOT INCLUDE WALKING TO GET REPLACEMENT GUN OR WALKING TO GUN AND HOSE OR WALKING TO SPRAY AREA

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	T4U VALUE	OPERATION/ELEMENT DESCRIPTION

AE	U	MAW	BTHEAXX	MJPHCXX	VARIABLE	HOSE(AIR),CONNECT OR DISCONNECT
						  STARTS—AS INDICATED IN CASE DESCRIPTION
						  INCLUDES—ALL MOTIONS NECESSARY TO CONNECT OR
						    DISCONNECT AN AIR HOSE WITH PLUG-IN FITTINGS
						  ENDS—CASES 01 AND 02 WITH RELEASE OF HOSE
						    CASES 03 AND 04 WITH HOSE IN HAND

					89	CASE 01 GET END OF HOSE AND CONNECT TO WALL OR BENCH OUTLET
					101	02 GET TOOL(END OF HOSE HELD IN HAND)AND CONNECT HOSE TO TOOL
					99	03 GET TOOL AND DISCONNECT HOSE
					77	04 GET END OF HOSE AND DISCONNECT FROM WALL OUTLET

FFF	U	MAA	MJPCHXX	MJPHPXX	VARIABLE	HAT,PUT ON AND REMOVE
						  STARTS—WITH GET HAT
						  INCLUDES—ALL MOTIONS NECESSARY TO PUT ON AND
						    REMOVE HAT USING BOTH HANDS
						  ENDS—WITH PLACE HAT ASIDE
						  CONDITION—HAT IS WITHIN EASY REACH

					132	CASE 01 BUMP HAT(LOOSE FITTING)
					185	02 SKULL HAT(CLOSE FITTING)

AE	U	MAW	BTHEAY1	MJPHW01	557	HOSE(AIR),WIND FOR STORAGE,25 FEET LONG
						  STARTS—WITH END OF HOSE IN HAND
						  INCLUDES—ALL MOTIONS NECESSARY TO FORM EIGHT
						    COILS WITH HOSE
						  ENDS—WITH COILED HOSE IN HAND

AF	U	OBW	11867	MJPIA01	224	INDICATOR(DIAL),ASSEMBLE TO MAGNETIC BASE
						  STARTS—WITH A REACH TO MAGNETIC BASE
						  INCLUDES—ALL THE MOTIONS NECESSARY TO GET BASE
						    AND INDICATOR,MOVE TOGETHER,POSITION INDICATOR
						    TO BASE AND ASSEMBLE,GET ALLEN WRENCH,TIGHTEN
						    SET SCREW,ASIDE WRENCH,ASIDE ASSEMBLY TO BENCH
						  ENDS—WITH RELEASE OF ASSEMBLY

AF	U	OBW	11864	MJPIA02	373	INDICATOR(DIAL,,ASSEMBLE TO HEIGHT GAUGE
						  STARTS—WITH REACH TO INDICATOR BOX
						  INCLUDES—ALL THE MOTIONS NECESSARY TO OPEN THE
						    INDICATOR BOX,REMOVE INDICATOR,PUT ON BENCH,
						    GET SHAFT,PUT SHAFT ON BENCH,CLOSE INDICATOR
						    BOX AND ASIDE,MOVE INDICATOR TO SHAFT,INSERT
						    SHAFT INTO INDICATOR,TIGHTEN CLAMPS,MOVE
						    INDICATOR TO HEIGHT GAUGE AND CLAMP,MOVE HANDS
						    ASIDE
						  ENDS—WITH RELEASE OF ASSEMBLY

AF	U	OBW	11868	MJPID01	179	INDICATOR(DIAL),DISASSEMBLE FROM MAGNETIC BASE
						  STARTS—WITH REACH TO GET ASSEMBLY
						  INCLUDES—ALL THE MOTIONS NECESSARY TO USE AN
						    ALLEN WRENCH TO LOOSEN SET SCREW IN BASE,ASIDE
						    WRENCH,BASE AND INDICATOR
						  ENDS—WITH RELEASE OF BASE

AF	U	OBW	11865	MJPID02	282	INDICATOR(DIAL),DISASSEMBLE FROM HEIGHT GAUGE
						  STARTS—WITH REACH TO HEIGHT GAUGE CLAMP
						  INCLUDES—ALL THE MOTIONS NECESSARY TO REMOVE
						    THE INDICATOR AND SHAFT FROM THE HEIGHT GAUGE,
						    REMOVE THE SHAFT FROM THE INDICATOR,GET
						    INDICATOR BOX,PLACE INDICATOR AND SHAFT IN
						    BOX,CLOSE AND ASIDE BOX
						  ENDS—WITH RELEASE OF BOX

FFF	U	MAA	MJPCJ01	MJPJP01	324	JACKET,PUT ON AND REMOVE
						  STARTS—WITH JACKET UNDER CONTROL
						  INCLUDES—ALL MOTIONS NECESSARY TO PUT ON AND
						    REMOVE A JACKET,COAT,OR SMOCK WITH FRONT
						    OPENING
						  ENDS—WITH JACKET IN HAND READY TO PLACE ASIDE
						  CONDITION—DOES NOT INCLUDE TIME FOR FASTEN AND
						    UNFASTEN

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	231	MJPLM01	211	LADDER,MOVE TO NEW LOCATION STARTS—WITH REACH TO LADDER INCLUDES—ALL MOTIONS NECESSARY TO GET LADDER,TILT FORWARD,LIFT,MOVE TO NEW LOCATION WITH ONE SIDESTEP,SET LADDER DOWN,AND ADJUST POSITION ENDS—WITH RELEASE OF LADDER CONDITION—APPLICABLE TO LADDERS WEIGHING TO 60 POUNDS.FOR RELOCATING GREATER DISTANCES, ALLOW APPROPRIATE FREQUENCIES OF BBM—HC—01
NAA	U	MAA	SCLSJM1	MJPMP01	204	MASK(FACE),PUT ON AND REMOVE,AIR FILTERING, DISPOSABLE TYPE MASK STARTS—WITH MASK IN HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE MASK TO FACE WITH ONE HAND AND MOVE RUBBER BAND OVER HEAD WITH OTHER HAND,POSITION MASK TO MOUTH AND NOSE,FORM NOSE SPRING TO FIT,GET SIDES OF MASK AND POSITION,RELEASE MASK,REACH TO RUBBER BAND AND REMOVE MASK ENDS—WITH MASK IN HAND
FFE	U	MAA	GIDSCA1	MJPPCXX	VARIABLE	PAPER(STENCIL),CUT ON PAPER CUTTER STARTS—WITH REACH TO SHEET OF STENCIL PAPER INCLUDES—ALL MOTIONS NECESSARY TO GET SHEET OF PAPER,PLACE ON TABLE,RAISE KNIFE BLADE, POSITION PAPER,LOWER KNIFE AND CUT PAPER, MOVE SHEET TO STORAGE,AND ASIDE SCRAP ENDS—WITH PAPER FOR STENCIL IN HAND CONDITIONS—TIME INCLUDED TO CUT STENCIL FROM BULK SHEET TO 180 SQUARE INCHES
					295	CASE 01 FIRST CUT
					134	02 REPOSITION PAPER AND MAKE ADDITIONAL CUT
FFE	U	MAA	GPLPA03	MJPPI01	112	PLUG,INSERT IN AND REMOVE FROM RECEPTACLE STARTS—WITH GET PLUG INCLUDES—ALL MOTIONS NECESSARY TO INSERT PLUG IN RECEPTACLE,TURN PLUG TO LOCK;GET PLUG TO REMOVE,TURN PLUG,AND REMOVE FROM RECEPTACLE ENDS—WITH ASIDE PLUG CONDITIONS—APPLICABLE TO ELECTRICAL PLUGS OR SIMILAR WHICH REQUIRE A TURN TO LOCK IN RECEPTACLE
FFF	U	MAA	MJPCP01	MJPPP01	685	PLUG,PUT IN AND REMOVE FROM EAR STARTS—WITH EARPLUG CONTAINER IN HAND INCLUDES—OPEN SCREW TYPE CONTAINER,REMOVE EARPLUG AND PLACE IN EARS,CLOSE CONTAINER, REMOVE PLUGS FROM EARS,OPEN CONTAINER,PLACE PLUGS IN CONTAINER,AND CLOSE CONTAINER ENDS—WITH CONTAINER IN HAND READY TO BE PLACED ASIDE CONDITION—GET AND ASIDE EARPLUG CONTAINER NOT INCLUDED
NF	U	MAF	3873	MJPRG01	137	RAG,GET FROM COVERED CAN STARTS—WITH BEND TO CAN INCLUDES—ALL MOTIONS NECESSARY TO OPEN CAN,GET RAG OR SIMILAR OBJECT FROM CAN,AND REPLACE LID ENDS—WITH ARISE FROM BEND CONDITION—LID DOES NOT BIND.LID IS OPENED BY HAND.ALSO APPLIES TO OBTAINING A SOILED RAG AND DEPOSITING IT IN COVERED CAN
DL	U	MAL	BEST	MJPSA01	219	STENCIL,AFFIX ON ROLL STAMP,TEST AND REMOVE STARTS—WITH A REACH TO THE PRE—PRINTED STENCIL INCLUDES—ALL THE TIME NECESSARY TO ATTACH A PRE—PRINTED STENCIL TO A ROLL—STAMP,TEST STAMP ON A PIECE OF PAPER,REMOVE THE STENCIL AND WIPE THE STENCIL WITH A CLOTH ENDS—WITH CLOTH AND STAMP ASIDE AND STENCIL IN HAND

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	3826	MJPSO01	772	STEPLADDER,OBTAIN FROM FLOOR,SET UP,TAKE DOWN, AND ASIDE TO FLOOR,LADDER TO 12 FEET TALL STARTS—STOOP TO PICK UP STEPLADDER INCLUDES—ALL MOTIONS NECESSARY TO GET STEPLADDER TO UPRIGHT POSITION,SPREAD AND LOCK LEGS,AND LOWER SHELF(SET UP);RAISE PAINT SHELF,UNLOCK BRACES,CLOSE LEGS,AND LOWER STEPLADDER TO FLOOR ENDS—WITH ARISE FROM BEND AFTER RELEASE OF STEPLADDER CONDITION—LADDER AT WORK PLACE PRIOR TO SET—UP AND AFTER TAKE—DOWN.FOR LADDERS WEIGHING UP TO 20 POUNDS
FFE	U	MAA	GJPURA6	MJPSP01	879	SMOCK(TIE TYPE),PUT ON AND REMOVE STARTS—WITH SMOCK IN HAND INCLUDES ALL THE MOTIONS NECESSARY TO PUT ON AND TAKE OFF A TIE TYPE,WRAP AROUND SMOCK ENDS—WITH SMOCK OFF READY TO BE PLACED ASIDE CONDITIONS—FOR USE IN CLEAN ROOM OPERATIONS INCLUDES FASTEN AND UNFASTEN
FFE	U	MAA	GTLHTA2	MJPTGXX	VARIABLE	TOOL,GET FROM AND RETURN TO TOOL DRAWER STARTS—WITH REACH TO DRAWER INCLUDES—ALL THE MOTIONS NECESSARY TO OPEN TOOL DRAWER,REMOVE TOOL,CLOSE DRAWER,ASIDE TOOL,GET TOOL,OPEN DRAWER,REPLACE TOOL AND CLOSE DRAWER ENDS—WITH TOOL IN DRAWER
					198	CASE 01 FIRST TOOL
					97	02 EACH ADDITIONAL TOOL
FFF	U	MAA	MJPSBXX	MJPTOXX	VARIABLE	TOOLBOX(MACHINIST),OPEN AND CLOSE STARTS—WITH GET LATCH OR KEY INCLUDES—ALL MOTIONS NECESSARY TO OPEN CAM TYPE LATCH,OPEN TOP LID,REMOVE FRONT COVER AND PLACE UNDER BOX,GET FRONT COVER,POSITION ON BOX,CLOSE LID,AND CLOSE LATCH.CASE 02 ALSO INCLUDES GET KEY,OPEN LOCK,AND CLOSE LOCK ENDS—WITH BOX CLOSED (CASE 01)OR ASIDE KEY (CASE 02)
					273	CASE 01 OPEN AND CLOSE UNLOCKED MACHINIST TOOLBOX
					499	02 OPEN AND CLOSE LOCKED MACHINIST TOOLBOX
FFF	U	MAA	MJPSB07	MJPTO03	195	TOOLBOX,OPEN AND CLOSE,STORAGE TYPE. 2.5X5X1.5 FEET STARTS—WITH REACH TO HASP INCLUDES—GET AND LIFT HASP,OPEN LID APPROXIMATELY 90 DEGREES,GET LID AND HASP,AND CLOSE LID ENDS—WITH LID CLOSED AND LATCHED CONDITION—DOES NOT INCLUDE TIME FOR OPENING OR REMOVING PADLOCK
AF	U	MAA	13ARAD	MJPTO04	70	TOOLBOX,OPEN AND CLOSE LID STARTS—WITH SIMO REACH TO LID AND LATCH INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP BOX AND LATCH,OPEN LATCH,RAISE LID,RELEASE BOX AND LID,REACH TO BOX LID,CLOSE LID AND RELEASE ENDS—WITH RELEASE CLOSED LID CONDITIONS—APPLICABLE TO TOOLBOX OR INSTRUMENT CASE APPROXIMATELY EIGHT INCHES WIDE WITH SINGLE LATCH.DOES NOT INCLUDE ACTIONS TO LATCH AFTER CLOSING.

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAW	BTHEAQ1	MJPTU01	158	TOOLBOX,UNLOCK,OPEN,CLOSE,AND LOCK STARTS—WITH KEY IN HAND AT LOCK INCLUDES—ALL MOTIONS NECESSARY TO UNLOCK TOOLBOX,GET HASP,OPEN LID,RELEASE HASP,GET TOP,CLOSE TOP,MOVE HASP TO LOCK POSITION, REACH TO KEY IN LOCK AND TURN KEY TO LOCK ENDS—WITH REMOVAL OF KEY FROM LOCK
NO	U	MAO	LDPC-1S	MJPWA01	167	WIRE,ATTACH TO HOOK,SINGLE STRAND WIRE STARTS—WITH WIRE IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE AND POSITION WIRE TO HOOK WITH LEFT HAND,REACH (SIMO)WITH RIGHT HAND AND GRASP WIRE AT HOOK, WRAP WIRE AROUND HOOK(TWO TIMES),RELEASE WIRE AND GRASP END,TWIST END OF WIRE AROUND ITSELF AND RELEASE(LEFT HAND HOLDS HOOK UNTIL WIRE IS WRAPPED AND TWISTED) ENDS—WITH RELEASE WIRE AND HOOK
NO	U	MAO	LDPC-1T	MJPWA02	110	WIRE,ATTACH TO PART STARTS—WITH REACH TO GET PART(LEFT HAND) INCLUDES—ALL THE MOTIONS NECESSARY TO GET PART WITH LEFT HAND AND THEN GET WIRE WITH RIGHT HAND,MOVE PART TO WIRE,WRAP WIRE ONE TIME AROUND PART,TWIST PART 180 DEGREES TO SECURE WIRE,RELEASE PART AND WIRE ENDS—WITH RELEASE PART AND WIRE CONDITIONS—SMALL PART—TO 2.5 POUNDS
NO	U	MAO	LDPC-1U	MJPWA03	83	WIRE,ATTACH TO LARGE PART STARTS—WITH LEFT HAND HOLDING PART ON WORK SURFACE—WIRE HELD IN RIGHT HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE AND POSITION WIRE TO PART,MOVE WIRE INTO OR AROUND PART WITH RIGHT HAND,RELEASE PART WITH LEFT HAND AND GRASP WIRE,PULL WIRE THROUGH OR AROUND PART,GRASP WIRE END IN RIGHT HAND (OTHER END IN LEFT HAND),PULL TWO ENDS TOGETHER,GRASP BOTH ENDS IN LEFT HAND,RELEASE WITH RIGHT HAND ENDS—WITH BOTH WIRES HELD BY LEFT HAND
FFD	U	TBA	GECCHOX	SJPCAXX	VARIABLE	CREAM(HAND),APPLY STARTS—WITH REACH TO CONTAINER OF CREAM INCLUDES—ALL THE MOTIONS NECESSARY TO GET CREAM,REMOVE CAP OR LID,ASIDE CAP OR LID, SQUEEZE CREAM FROM TUBE OR GET FROM JAR,MOVE HANDS TOGETHER TO RUB IN CREAM,GET JAR OR TUBE,REPLACE LID OR CAP,ASIDE CONTAINER ENDS—WITH ASIDE CONTAINER(TUBE OR JAR)
					592	CASE 01 CREAM IN TUBE
					532	02 CREAM IN JAR
FFE	U	MAA	KJPSCXX	SJPCR01	261	CABLE,REMOVE FROM AND RETURN TO CASE,CABLE ROLLED AND STOWED IN CASE STARTS—WITH GET CABLE FROM CASE INCLUDES—ALL MOTIONS NECESSARY TO LIFT ROLLED CABLE FROM CASE,ASIDE CABLE;GET END OF CABLE, ROLL CABLE,AND PLACE IN CASE ENDS—WITH RELEASE OF CABLE CONDITION—CABLE LIES FLAT IN CASE WITH NO FASTENERS,CABLE IS TEN FEET LONG,NO TIME INCLUDED FOR OPENING AND CLOSING CASE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	J	MAA	KJPSCXX	SJPCR02	1218	CABLE,REMOVE FROM AND RETURN TO CASE,CABLE WOUND ON RACK IN LID STARTS—WITH GET CABLE END INCLUDES—ALL MOTIONS NECESSARY TO REMOVE END OF CABLE FROM CLIP,UNWIND CABLE FROM RACK,LOOP CABLE LOOSELY OVER HAND,ASIDE CABLE,GET CABLE,UNTANGLE CABLE,ATTACH CLIP TO CABLE, AND WIND CABLE ON RACK IN LID ENDS—WITH RELEASE CABLE CONDITIONS—CABLE IS TEN FEET LONG,NO TIME INCLUDED FOR OPENING AND CLOSING CASE
FFE	U	MAA	RLGJPG1	SJPGF01	2032	GUN(HAND OPERATED GREASE),FILL STARTS—WITH REACH TO GET GREASE GUN INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP AND UNSCREW BARREL FROM GUN,ASIDE HEAD,GRASP AND PULL PLUNGER OUT TO LIMIT,PLACE BARREL ON BENCH,REMOVE AND ASIDE GREASE CAN LID,GET GUN BARREL AND PLACE END IN GREASE,TWIST AROUND IN GREASE,REMOVE FROM GREASE,HOLD GREASE CAN ON BENCH,BOUNCE GUN ON BENCH TO SETTLE GREASE, PUT END OF BARREL BACK IN GREASE,TWIST AROUND IN GREASE,PULL BARREL FROM GREASE,GET CLOTH AND WIPE OFF OUTSIDE OF BARREL,ASIDE CLOTH TO TRASH,GET GUN HEAD AND SCREW ONTO BARREL,RE-LEASE SPRING PLUNGER,PUMP LEVER TO PRIME GUN, ASIDE GUN,CLOSE GREASE CAN(PRY OPEN TYPE) ENDS—WITH GUN FILLED AND ASIDE,GREASE CAN CLOSED CONDITIONS—REMOVE HEAD FROM GUN BARREL,10-15 THREADS,UNOBSTRUCTED,CLEAR
FFE	U	MUA	GJPPAA1	SJPGP01	3452	GUN(PAINT SPRAY),PREPARE FOR USE STARTS—WITH GET SPRAY GUN INCLUDES—ALL MOTIONS NECESSARY TO REMOVE GUN FROM POT,ASIDE GUN AND POT,TURN TO PAINT CABINET,OPEN CABINET DOOR(UNLOCKED AND UNLATCHED),LOCATE PAINT IN CABINET,GET CAN OF PAINT,CLOSE CABINET DOOR,TURN TO WORK AREA, OPEN PAINT CAN WITH PRY TOOL,POUR ONE QUART OF PAINT IN POT,CLOSE PAINT CAN,TAP LID WITH HAMMER TO SEAL,TURN TO PAINT CABINET,OPEN CABINET DOOR,ASIDE PAINT,CLOSE CABINET DOOR, TURN TO WORK AREA,MOVE PAINT POT TO THINNER CONTAINER,OPEN SPIGOT,POUR THINNER,CLOSE SPIGOT,SET POT ON BENCH,STIR PAINT WITH PADDLE,WIPE PADDLE WITH CLOTH,INSTALL GUN ON POT,AND ATTACH AND REMOVE AIR HOSE AT SPRAY BOOTH ENDS—WITH PREPARATION COMPLETED CONDITIONS—WALKING TIMES NOT INCLUDED,CAN OF PAINT WEIGHS TO 20 POUNDS
FFH	U	MAA	KJPKN01	SJPK001	136	KNIFE(POCKET),OPEN AND CLOSE STARTS—WITH REACH TO KNIFE INCLUDES—ALL THE MOTIONS NECESSARY TO PICK UP POCKET KNIFE,POSITION FINGERNAIL IN BLADE SLOT AND OPEN BLADE,REGRASP KNIFE,PUSH BLADE CLOSED AND ASIDE KNIFE ENDS—WITH ASIDE KNIFE CONDITIONS—APPLIES TO COMMON POCKET KNIFE WITHOUT BLADE LOCK OR CATCH

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

FFE	U	NAA	KITSUAA	SJPMS01	1659	MICROMETER(INSIDE),SET UP WITH TWO EXTENSIONS
						STARTS—WITH REACH TO MICROMETER CASE
						INCLUDES—ALL MOTIONS NECESSARY TO GET CASE,
						  OPEN(HASP TYPE FASTENER),GET MICROMETER FROM
						  CASE,REMOVE CAPS FROM EACH END OF MICROMETER,
						  PLACE CAPS IN CASE,IDENTIFY AND GET FIRST
						  EXTENSION,PLACE EXTENSION IN MICROMETER,SECURE
						  WITH CAP,IDENTIFY AND GET SECOND EXTENSION,
						  INSTALL EXTENSION IN MICROMETER,CLOSE AND
						  ASIDE CASE;GET AND OPEN CASE,DISASSEMBLE
						  MICROMETER,PLACE EXTENSIONS AND MICROMETER IN
						  CASE,AND CLOSE AND ASIDE CASE
						ENDS—WITH RELEASE OF CASE
						CONDITIONS—APPLICABLE TO INSIDE MICROMETER
						  WITH SEPARATE EXTENSIONS FOR LENGTH ADJUSTMENT

FFE	U	NAA	GJPATAX	SJPPMXX	VARIABLE	PLATE,MASK EDGES WITH TAPE PRIOR TO PAINTING
						STARTS—WITH REACH TO GET MASKING TAPE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET ROLL
						  OF TAPE,TEAR OFF TWO PIECES,APPLY ALONG EDGE
						  OF PLATE,TRIM WITH KNIFE,ASIDE ROLL,KNIFE
						  AND TRIMMINGS
						ENDS—WITH ASIDE TRIMMINGS

					689	CASE 01 MASK PLATE 2 1/4 X 1 1/2 INCHES
					484	02 MASK PLATE 2 1/4 X 7/8 INCHES

FFE	U	NAA	KALSA10	SJPSC01	994	STRAIGHTEDGE,CLAMP TO PART WITH THREE C-CLAMPS
						STARTS—WITH GET STRAIGHTEDGE TO 60 INCHES LONG
						INCLUDES—ALL MOTIONS NECESSARY TO PLACE
						  STRAIGHTEDGE ON PART,ALIGN,GET THREE CLAMPS
						  AND PLACE NEAR STRAIGHTEDGE,INSTALL FIRST
						  C-CLAMP,TURN,WALK TO OTHER END OF STRAIGHT-
						  EDGE,INSTALL SECOND C-CLAMP,TURN,WALK TO
						  MIDDLE,AND INSTALL THIRD CLAMP
						ENDS—WITH RETURN TO END OF STRAIGHTEDGE

DFF	U	NAA	GTLYPA1	SJPTAXX	VARIABLE	TORCH(PORTABLE PROPANE),ASSEMBLE/DISASSEMBLE
						STARTS—WITH REACH TO TORCH CASE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET
						  TORCH CASE,OPEN CASE,REMOVE PROPANE BOTTLE AND
						  BURNER ASSEMBLY FROM CASE,ASSEMBLE BURNER AND
						  BOTTLE,TIGHTEN BY HAND,ASIDE TORCH TO COOL
						  AFTER USE,GET TORCH,LOOSEN BURNER ASSEMBLY
						  FROM BOTTLE BY HAND,REMOVE BURNER FROM
						  BOTTLE,PLACE BURNER ASSEMBLY AND BOTTLE IN
						  CASE,CLOSE AND LATCH CASE,GET AND PLACE CASE
						  ASIDE
						ENDS—WITH CASE ASIDE

					627	CASE 01 ASSEMBLE AND DISASSEMBLE PROPANE TORCH
					615	02 CHANGE TIP ON BURNER

NF	U	NAF	333	BLOLD01	43	LINE,DRAW USING SQUARE
						STARTS—WITH MARKING INSTRUMENT IN HAND WITHIN
						  FOUR INCHES OF SQUARE
						INCLUDES—ALL MOTIONS NECESSARY TO POSITION
						  MARKING INSTRUMENT TO SQUARE AND SURFACE AND
						  DRAW A LINE TO 12 INCHES LONG
						ENDS—WITH MARKING INSTRUMENT IN CONTACT WITH
						  SURFACE

NF	U	NAF	965	BLOLSXX	VARIABLE	LINE,SCRIBE,TO SCALE OR STRAIGHTEDGE
						STARTS—WITH MOVE SCRIBER TO START POINT
						INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE
						  SCRIBER TO START,DRAW LINE,CHECK LINE AND
						  REMOVE SCRIBER FROM LINE
						ENDS—WITH SCRIBER IN HAND AWAY FROM LINE

					63	CASE 01 SCRIBE 6 INCH LINE
					87	02 SCRIBE 18 INCH LINE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	1057	BLOPM01	50	POINT,MARK STARTS—WITH MARKING INSTRUMENT IN HAND INCLUDES—ALL MOTIONS NECESSARY TO MOVE MARKING INSTRUMENT TO LOCATION,MARK POINT, AND MOVE AWAY ENDS—WITH MARKING INSTRUMENT IN HAND CONDITION—TIME FOR POSITIONING MEASURING INSTRUMENT NOT INCLUDED
NF	U	MAF	1022	BLOSA01	189	STRAIGHTEDGE,ALIGN,TO POINTS OR LINE STARTS—WITH STRAIGHTEDGE IN HAND INCLUDES—ALL MOTIONS NECESSARY TO LAY STRAIGHTEDGE ON SURFACE,AND POSITION TO TWO POINTS OR TO A LINE ENDS—WITH STRAIGHTEDGE HELD IN POSITION
NAA	U	MAA	OLOLIXX	MLOLSXX	VARIABLE	LINE,SCRIBE TO SCALE(STRAIGHTEDGE) STARTS—WITH REACH TO GET SCRIBE AND STRAIGHT-EDGE INCLUDES—ALL THE MOTIONS NECESSARY TO GET STRAIGHTEDGE AND MARKER,POSITION STRAIGHTEDGE TO INDEX POINT AND SECOND POINT,ADJUST TO BOTH POINTS AND DRAW OR SCRIBE LINE THROUGH POINTS OR FROM POINT TO POINT,LAY ASIDE MARKER AND STRAIGHTEDGE ENDS—WITH ASIDE MARKER AND STRAIGHTEDGE CONDITIONS—APPLIES TO 6 OR 12-INCH SCALE OR 24-INCH RULE OR EQUIVALENT STRAIGHTEDGE,USING PENCIL,SCRIBE,AWL OR SIMILAR MARKING DEVICE ON SURFACES WHICH ARE CURVED OR SEMI-CURVED PLANES,POSITIONED EITHER VERTICALLY,HORIZON-TALLY OR OVERHEAD.CONTROL POINTS ARE PRE-EXISTING SURFACE INDEX POINTS OR THE GRADUA-TIONS ON SCALE, RULE OR STRAIGHTEDGE.TIMES ARE FOR PENCIL MARKINGS WITH NO PRESSURE;ADD U BEL—AP—01(16 TMUS)WHEN USING SCRIBE OR AWL
					213	CASE 01 RANDOM LENGTH LINE TO SIX INCHES ON SIX-INCH SCALE OR EQUIVALENT STRAIGHTEDGE—FIRST OR ONLY
					148	02 EACH ADDITIONAL RANDOM LENGTH LINE UP TO SIX INCHES
					270	03 RANDOM LENGTH LINE TO 12 INCHES ON 12-INCH SCALE,RULE OR EQUIVALENT STRAIGHTEDGE—FIRST OR ONLY
					184	04 EACH ADDITIONAL RANDOM LENTGH LINE TO 12 INCHES
					320	05 RANDOM LENGTH LINE TO 24 INCHES ON 24-INCH SCALE OR EQUIVALENT STRAIGHTEDGE—FIRST OR ONLY
					234	06 EACH ADDITIONAL RANDOM LENGTH LINE TO 24 INCHES
					267	07 CONTROLLED LENGTH LINE BETWEEN POINTS TO SIX INCHES ON SIX-INCH SCALE—FIRST OR ONLY
					176	08 EACH ADDITIONAL CONTROLLED LENGTH LINE TO SIX INCHES
					299	09 CONTROLLED LENGTH LINE BETWEEN POINTS TO 12 INCHES ON 12-INCH SCALE—FIRST OR ONLY
					213	10 EACH ADDITIONAL CONTROLLED LENGTH LINE TO 12 INCHES
					397	11 CONTROLLED LENGTH LINE BETWEEN POINTS TO 24 INCHES ON 24-INCH SCALE—FIRST OR ONLY
					312	12 EACH ADDITIONAL CONTROLLED LENGTH LINE TO 24 INCHES

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	KPMES01	MLOLS13	125	LINE,SCRIBE,EXACT POSITION,METAL SURFACE STARTS—WITH REACH TO GET SCRIBE INCLUDES—ALL THE MOTIONS NECESSARY TO GET SCRIBE,POSITION TO EXACT LOCATION AND MOVE TO MAKE 1/4 INCH MARK IN METAL SURFACE,ASIDE SCRIBE ENDS—WITH ASIDE SCRIBE
DL	U	MAF	DP01	MLOPM01	188	POINT,MARK WITH PENCIL STARTS—WITH REACH TO PENCIL IN POCKET INCLUDES—ALL THE MOTIONS NECESSARY TO GET PENCIL FROM POCKET,MARK MEASURED POINT AND RETURN PENCIL TO POCKET ENDS—WITH RELEASE OF PENCIL IN POCKET
MAA	U	MAA	OLOMMXX	SLODMXX	TABLE	DIMENSION,MEASURE AND MARK STARTS—WITH REACH TO GET MEASURING AND MARKING DEVICES INCLUDES—ALL THE MOTIONS NECESSARY TO GET THE DEVICES,POSITION MEASURING DEVICE TO INDEX POINT,POSITION DEVICE TO SECOND POINT,ADJUST TO BOTH POINTS,READ DIMENSION,POSITION MARKING DEVICE TO SURFACE AND SCALE AT DESIRED LOCA-TION AND MARK SURFACE,ASIDE DEVICES ENDS—WITH ASIDE MEASURING AND MARKING DEVICES CONDITIONS—APPLIES TO 6-12 INCH SCALE, 12-24 INCH RULE,6-10 FOOT STEEL TAPE WITH PENCIL,SCRIBE,AWL OR EQUIVALENT MARKING DEVICE;FLAT OR SEMI-CURVED GEOMETRIC PLANES; OVERHEAD,VERTICAL OR HORIZONTAL WITH DIMENSIONS AND MARKS LIMITED TO WITHIN 36 INCHES OF ANY INITIAL INDEX POINT.TIME IS TO MARK WITH PENCIL,NO PRESSURE. IF SCRIBE OR AWL IS USED ADD TIME FOR ELEMENT U BEL-AP-01(TWO TIMES-16 TMUS X 2-32 TMUS). LOOSE-POSITION DEVICE TO WITHIN 1/16 INCH OF REFERENCE POINTS,READ TO NEAREST 1/4 INCH,MARK TO WITHIN 1/16 INCH OF SCALE GRADUATION.CLOSE-POSITION DEVICE TO WITHIN 1/32 INCH OF REF-ERENCE POINTS,READ TO NEAREST 1/16 INCH,MARK TO WITHIN 1/32 INCH OF SCALE GRADUATION.EXACT-POSITION DEVICE TO WITHIN 1/64 INCH OF REFER-ENCE POINTS,READ TO NEAREST 1/32 INCH,MARK TO WITHIN 1/64 INCH OF SCALE GRADUATION.

TYPE DEVICE		LOOSE A	POSITION CLOSE B	EXACT C
SCALE(6-12 INCH)OR 12-24 INCH RULE				
FIRST MEASUREMENT	A	296	358	505
EACH ADDITIONAL	B	185	247	354
STEEL TAPE(6-10 FEET)				
FIRST MEASUREMENT	C	394	456	603
EACH ADDITIONAL	D	207	269	416

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
MAA	U	MAA	BLUBLXX	BLUBLXX	VARIABLE	SURFACE(LINEAR),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK STARTS—WITH APPLICATOR IN HAND AND ON OBJECT INCLUDES—ALL MOTIONS NECESSARY TO SPREAD LUBRICANT WITH ONE WIPING MOTION FORWARD AND BACK ENDS—WITH APPLICATOR IN CONTACT WITH SURFACE
					11	CASE 01 LINEAR LUBRICATION TO 6 INCHES
					21	02 LINEAR LUBRICATION 6-12 INCHES

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	MAA	BLUBSXX	BLUBSXX	VARIABLE	SURFACE(SPOT),LUBRICATE WITH BRUSH,CLOTH, FINGER,OR STICK STARTS—WITH APPLICATOR IN HAND AND ON OBJECT INCLUDES—ALL MOTIONS NECESSARY TO SPREAD LUBRICANT ON A SPOT WITH A WIPING MOTION FORWARD AND BACK ENDS—WITH APPLICATOR IN CONTACT WITH SURFACE CONDITION—SPOT SIZE IS DETERMINED BY APPLICATOR SIZE
					4	CASE 01 SPOT LUBRICATION
					15	02 SPOT LUBRICATION,WITH CARE
AE	U	MAW	FTDLU01	BLUDL01	56	DIE(OR TAP),LUBRICATE WITH OIL FROM LEVER OR DIAPHRAGM TYPE CAN STARTS—WITH MOVEMENT OF SPOUT TO LUBRICATION POINT INCLUDES—ALL MOTIONS NECESSARY TO DEPRESS LEVER OR DIAPHRAGM AND SQUIRT OIL ON DIE OR TAP THREE TIMES ENDS—WITH OIL CAN SPOUT OVER DIE OR TAP
FFH	U	MAA	BLUGB01	BLUGB01	34	LUBRICANT,APPLY TO FITTING WITH BUTTON TYPE GUN STARTS—WITH HAND ON GREASE GUN AND GUN ON FITTING INCLUDES—ALL MOTIONS NECESSARY TO DEPRESS BUTTON AND WAIT WHILE LUBRICANT IS FORCED INTO FITTING BY AIR PRESSURE ENDS—WITH RELEASE OF BUTTON AND WITH GUN ON FITTING CONDITION—APPLIES TO AIR OPERATED GREASE GUN. DOES NOT APPLY TO FILLING A RESERVOIR
FFH	U	MAA	BLUGL01	BLUGL01	36	LUBRICANT,APPLY TO FITTING WITH HAND OPERATED LEVER TYPE GUN(PER STROKE) STARTS—WITH HAND ON LEVER AND GUN ON FITTING INCLUDES—ALL MOTIONS NECESSARY TO MAKE ONE PUMP MOTION AND RETURN LEVER FOR NEXT STROKE ENDS—WITH HAND ON LEVER AND GUN ON FITTING CONDITION—ALSO APPLIES TO LUBRICATION TANKS WHICH HAVE LEVER TYPE PUMPS FOR ONE HANDED USE
FFH	U	MAA	BLUOL01	BLUOL01	28	LUBRICANT,APPLY WITH OIL CAN(PER LINEAR FOOT) STARTS—WITH HAND ON TRIGGER OR CAN AND WITH SPOUT IN PLACE INCLUDES—DEPRESSING TRIGGER OR DIAPHRAGM AND MOVEMENT OF OIL CAN TO COVER SURFACE TO BE LUBRICATED ENDS—WITH HAND ON CAN AFTER LUBRICATION CONDITION—APPLIES TO TRIGGER OR DIAPHRAGM TYPE OIL CANS
FFH	U	MAA	BLUOS01	BLUOS01	18	OIL,APPLY TO SPOT WITH TRIGGER TYPE OIL CAN STARTS—WITH SPOUT IN PLACE AND HAND ON TRIGGER INCLUDES—MOVING TRIGGER IN AND OUT TO LUBRICATE SPOT ENDS—WITH HAND ON TRIGGER AFTER LUBRICATION
FFH	U	MAA	BLUOS02	BLUOS02	15	OIL,APPLY TO SPOT WITH DIAPHRAGM TYPE OIL CAN STARTS—WITH HAND ON DIAPHRAGM AND SPOUT IN PLACE INCLUDES—MOVEMENT OF DIAPHRAGM IN AND OUT TO LUBRICATE ONE SPOT ENDS—WITH HAND ON CAN AFTER LUBRICATION
FFH	U	MAA	BLUTA01	BLUTA01	26	LUBRICANT,APPLY WITH TUBE TO AREA,1 INCH X 1 INCH STARTS—WITH TUBE IN HAND AND IN PLACE AT BEGINNING POINT OF LUBRICATION INCLUDES—ALL MOTIONS NECESSARY TO SQUEEZE TUBE ONE TIME AND LUBRICATE AREA, 1 INCH X 1 INCH WITH ONE FORWARD AND ONE BACKWARD STROKE ENDS—WITH TUBE IN HAND AFTER LUBRICATING

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BLUTS01	BLUTS01	20	LUBRICANT,APPLY WITH TUBE TO SPOT,1/4X1/4 INCH STARTS—WITH TUBE IN HAND AND IN PLACE AT SPOT TO BE LUBRICATED INCLUDES—ALL THE MOTIONS NECESSARY TO SQUEEZE TUBE TO EXTRACT LUBRICANT AND APPLY TO SPOT MEASURING 1/4X1/4 INCH ENDS—WITH TUBE IN HAND AFTER LUBRICATING CONDITION—APPLIES TO TUBES HAVING 1/4 INCH DIAMETER NOZZLE
FFD	U	MAA	GEAIN98	SLUALXX	VARIABLE	LUBRICANT,APPLY TO SMALL OBJECT STARTS—WITH REACH TO GET LUBE APPLICATOR INCLUDES—ALL THE MOTIONS NECESSARY TO GET APPLICATOR,GET LUBRICANT ON APPLICATOR,MOVE APPLICATOR TO OBJECT AND APPLY,ASIDE APPLICA- TOR ENDS—WITH ASIDE APPLICATOR
					96	CASE 01 APPLY TO VERY SMALL PART(4=SIX INCH MOVES)
					124	02 APPLY TO SMALL PART(8=SIX INCH MOVES)
FFE	U	MAA	RLGGZXX	SLULAXX	TABLE	LUBRICANT,APPLY TO ZERK FITTING WITH HAND OPERATED GUN STARTS—WITH REACH TO GET GREASE GUN INCLUDES—ALL THE MOTIONS NECESSARY TO GET GREASE GUN,SEAT NOZZLE ON ZERK FITTING,FILL FITTING WITH LUBRICANT,DISENGAGE GUN FROM FITTING,AND ASIDE GUN ENDS—WITH ASIDE GUN CONDITIONS—APPLIES TO HAND LEVER TYPE GREASE GUN ONLY

STROKES TO FILL FITTING		FIRST OR ONLY FITTING A	EACH ADDITIONAL FITTING B
1	A	165	111
2	B	201	147
3	C	237	183
4	D	273	219
5	E	309	255
6	F	345	291

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BMHSM01	BMHOS01	30	OBJECT,START MOVING BY PUSHING(WHEELED OBJECT) STARTS—WITH HAND(S) ON OBJECT TO BE MOVED INCLUDES—APPLY PRESSURE AND MOVE UP TO 12 INCHES ENDS—WITH HAND(S)ON OBJECT CONDITION—ALSO APPLIES TO STOPPING OBJECT BEING PUSHED
NF	U	MAL	2242	BMHWP01	160	WHEELBARROW,PICK UP HANDLES AND PUT DOWN STARTS—WITH BEND TO HANDLE INCLUDES—ALL THE MOTIONS NECESSARY TO BEND, GRASP HANDLES,ARISE;AND BEND,RELEASE HANDLES AND ARISE ENDS—WITH ARISE AFTER RELEASE OF HANDLES CONDITION—ENW NOMINAL
FFD	U	MAA	MMHOW01	MMHOS01	42	OBJECT,START MOVEMENT BY PUSHING STARTS—WITH REACH TO HANDLE INCLUDES—GET HANDLES,APPLY PRESSURE AND MOVE APPROXIMATELY 12 INCHES ENDS—WITH OBJECT IN MOTION CONDITION—APPLICABLE TO WHEEL MOUNTED OBJECTS SUCH AS CARTS,WAGONS,ETC.

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BNFBS01	BNFBT01	197	BOW,TIE IN STRING ON OBJECT STARTS—WITH STRING WRAPPED ON PACKAGE AND END IN HAND INCLUDES—HAND AND FINGER MOTIONS REQUIRED TO FORM AND SECURE BOW KNOT ENDS—WITH RELEASE OF BOW
FFD	U	MAA	BNFBS02	BNFBU01	40	BOW,UNTIE STARTS—WITH REACH TO END OF STRING INCLUDES—ALL MOTIONS NECESSARY TO UNTIE BOW AND SINGLE KNOT ENDS—WITH RELEASE OF STRING
FFF	U	MAA	BNFKD01	BNFKT01	215	KNOT,TIE,SQUARE,USING TWO ENDS OF STRING STARTS—WITH STRING WRAPPED ON PACKAGE AND ENDS IN HAND INCLUDES—ALL FINGER AND HAND MOTIONS NECESSARY TO FORM AND SECURE SQUARE KNOT ENDS—WITH KNOT PULLED TIGHT, STRING ENDS IN HAND CONDITION—BOTH ENDS OF STRING CUT BEFORE TYING
FFF	U	MAA	BNFKS01	BNFKT02	101	KNOT,TIE,HALF HITCH,USING SINGLE END OF LINE STARTS—WITH STRING WRAPPED ON PACKAGE AND RUNNER IN HAND INCLUDES—ALL HAND AND FINGER MOTIONS NECESSARY TO FORM AND SECURE HALF HITCH KNOT ENDS—WITH KNOT PULLED TIGHT AND STRING IN HAND CONDITION—END OF LINE CUT BEFORE TYING
FFF	U	MAA	BNFKS02	BNFKT03	95	KNOT,TIE,(STRING),SLIP HALF HITCH,USING SINGLE END OF LINE STARTS—WITH STRING WRAPPED ON PACKAGE AND RUNNER IN HAND INCLUDES—ALL HAND AND FINGER MOTIONS NECESSARY TO FORM AND SECURE SLIP HALF HITCH KNOT ENDS—WITH KNOT PULLED TIGHT AND STRING IN HAND CONDITION—END OF LINE CUT BEFORE TYING
FFF	U	MAA	BNFKS03	BNFKT04	70	KNOT,TIE,CLOVE HITCH,USING SINGLE END OF LINE STARTS—WITH STRING WRAPPED ON PACKAGE AND RUNNER IN HAND INCLUDES—ALL HAND AND FINGER MOTIONS NECESSARY TO FORM AND SECURE CLOVE HITCH ENDS—WITH KNOT PULLED TIGHT AND STRING IN HAND CONDITION—END OF STRING CUT BEFORE TYING
FFF	U	MAA	BNFKS04	BNFKT05	83	KNOT,TIE(STRING),BOWLINE,USING SINGLE END OF LINE STARTS—WITH STRING WRAPPED ON PACKAGE AND RUNNER IN HAND INCLUDES—ALL HAND AND FINGER MOTIONS NECESSARY TO FORM AND SECURE BOWLINE KNOT ENDS—WITH KNOT PULLED TIGHT AND STRING IN HAND CONDITION—END OF STRING CUT BEFORE TYING
NF	U	MAA	PMB4Q	BNFKT06	78	KNOT,TIE(ROPE),HALF HITCH STARTS—WITH ROPE IN HAND INCLUDES—ALL MOTIONS NECESSARY TO TIE A HALF HITCH KNOT ENDS—WITH RELEASE OF KNOT CONDITIONS—APPLICABLE TO RIGGING OR SIMILAR OPERATIONS
NF	U	MAF	1608	BNFKT07	147	KNOT,TIE(ROPE),CLOVE HITCH STARTS—WITH ROPE IN HAND INCLUDES—ALL MOTIONS NECESSARY TO TIE CLOVE HITCH,RING,OR COW HITCH KNOT ENDS—WITH RELEASE OF ROPE CONDITION—APPLICABLE TO RIGGING OR SIMILAR OPERATIONS

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

NF	U	MAF	1606	BNFKT08	100	KNOT,TIE(ROPE),BOWLINE
						STARTS-WITH ROPE IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO TIE
						    BOWLINE KNOT
						ENDS-WITH RELEASE OF ROPE
						CONDITIONS-APPLICABLE TO RIGGING OR SIMILAR
						    OPERATIONS

NF	U	MAA	1607	BNFKT09	267	KNOT,TIE(ROPE),BARREL HITCH,TIMBER HITCH,OR
						STOPPER
						STARTS-WITH ROPE IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO TIE A BARREL
						    HITCH,TIMBER HITCH,OR STOPPER KNOT
						ENDS-WITH RELEASE OF THE ROPE
						CONDITION-APPLICABLE TO RIGGING OR SIMILAR
						    OPERATIONS

NF	U	MAA	1609	BNFKT10	164	KNOT,TIE(ROPE),SQUARE
						STARTS-WITH ROPE IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO TIE A SQUARE
						    KNOT
						ENDS-WITH RELEASE OF ROPE
						CONDITION-APPLICABLE TO RIGGING OR SIMILAR
						    OPERATIONS

DNA	U	MAA	JPAMNEA	MMFEMXX	VARIABLE	EDGE,MASK WITH PAPER TAPE
						STARTS-WITH ROLL OF TAPE IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO PLACE END OF
						    TAPE TO FIRST POINT,UNROLL ONE FOOT OF TAPE,
						    POSITION TAPE TO SURFACE,SMOOTH AND SEAT TAPE
						    WITH HAND,AND TEAR TAPE FROM ROLL
						ENDS-WITH ROLL OF TAPE IN HAND

					487	CASE 01 MASK FIRST OR SINGLE FOOT,POSITION TAPE EXACT

					369	02 MASK EACH ADDITIONAL FOOT,TAPE TORN
						    FROM ROLL AFTER MASKING EACH FOOT,
						    POSITION TAPE EXACT

					344	03 MASK EACH ADDITIONAL FOOT,CONTINUOUS TAPING,POSITION TAPE EXACT
					298	04 MASK FIRST OR SINGLE FOOT,POSITION TAPE APPROXIMATE

					116	05 MASK EACH ADDITIONAL FOOT,TAPE TORN
						    FROM ROLL AFTER MASKING EACH FOOT,
						    POSITION TAPE APPROXIMATE

					95	06 MASK EACH ADDITIONAL FOOT,CONTINUOUS TAPING,POSITION TAPE APPROXIMATE
AE	U	MAM	SECEAXX	MMFFOXX	VARIABLE	FASTENER,OPEN AND CLOSE ON CASE STARTS-WITH REACH TO FASTENER INCLUDES-ALL MOTIONS NECESSARY TO OPEN AND CLOSE FASTENER ENDS-WITH RELEASE OF FASTENER
					64	CASE 01 LUGGAGE TYPE FASTENER
					71	02 BAIL TYPE FASTENER

FFE	U	MAA	GPLPA01	MMFIP01	93	PLUG(OR CAP),INSTALL,NON-THREADED PLASTIC
						STARTS-WITH REACH TO PLUG
						INCLUDES-ALL MOTIONS NECESSARY TO POSITION
						    PLUG TO OPENING AND APPLY PRESSURE TO SEAT
						    PLUG
						ENDS-WITH RELEASE OF PLUG

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION

FFE	U	MAA	GNFSAAX	MNFISXX	VARIABLE	WIRE(SAFETY),INSTALL USING SAFETY WIRE TWISTING PLIERS
						  STARTS—WITH REACH TO SAFETY WIRE TWISTING PLIERS
						  INCLUDES—ALL MOTIONS NECESSARY TO GET PLIERS, GET LENGTH OF SAFETY WIRE FROM ROLL, THREAD WIRE THROUGH ANCHOR POINT,TWIST WIRE WITH TWISTING PLIERS,CUT EXCESS WIRE,AND FOLD END OVER.CASE 02 INCLUDES ONLY THREAD WIRE THROUGH ANCHOR POINT AND TWIST WITH TWISTING PLIERS
						  ENDS—WITH RELEASE OF TWISTING PLIERS
						  CONDITION—APPLICABLE TO SAFETY WIRE TO .0625 INCH DIAMETER

					903	CASE 01 SINGLE OR FIRST ANCHOR POINT
					581	02 EACH ADDITIONAL ANCHOR POINT

FFF	U	MAA	MNFKI08	MNFKI01	311	KEY,INSTALL,WOODRUFF WITH HAMMER AND DRIFT PUNCH
						  STARTS—WITH GET KEY
						  INCLUDES—ALL MOTIONS NECESSARY TO INSTALL WOODRUFF KEY USING HAMMER AND DRIFT PUNCH
						  ENDS—WITH LAY TOOLS ASIDE

FFF	U	MAA	MNFKI09	MNFKI02	87	KEY,INSTALL,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS NEEDED
						  STARTS—WITH GET KEY
						  INCLUDES—ALL MOTIONS NECESSARY TO INSTALL KEY IN SLOT WHEN NO TOOLS ARE NEEDED
						  ENDS—WITH RELEASE OF KEY AFTER INSTALLATION

FFF	U	MAA	MNFKI10	MNFKI03	293	KEY,INSTALL,STRAIGHT MACHINE,TIGHT FIT,USE OF HAMMER AND DRIFT PUNCH REQUIRED
						  STARTS—WITH GET KEY
						  INCLUDES—ALL MOTIONS NECESSARY TO INSTALL TIGHT FITTING KEY USING HAMMER AND DRIFT PUNCH
						  ENDS—WITH PLACE TOOLS ASIDE

FFF	U	MAA	MNFKR07	MNFKR01	370	KEY,REMOVE,WOODRUFF,WITH HAMMER AND DRIFT PUNCH
						  STARTS—WITH GET TOOLS
						  INCLUDES—ALL MOTIONS NECESSARY TO USE HAMMER AND DRIFT PUNCH TO REMOVE WOODRUFF KEY
						  ENDS—WITH PLACE TOOLS AND KEY ASIDE

FFF	U	MAA	MNFKR08	MNFKR02	38	KEY,REMOVE,STRAIGHT MACHINE,LOOSE FIT,NO TOOLS REQUIRED
						  STARTS—WITH REACH TO KEY
						  INCLUDES—ALL MOTIONS NECESSARY TO REMOVE LOOSE FITTING KEY FROM SLOT
						  ENDS—WITH PLACE KEY ASIDE

FFF	U	MAA	MNFKR09	MNFKR03	258	KEY,REMOVE,STRAIGHT MACHINE,HAMMER AND DRIFT PUNCH REQUIRED
						  STARTS—WITH REACH TO TOOL
						  INCLUDES—ALL MOTIONS NECESSARY TO GET TOOLS, DRIVE KEY FROM SEAT,AND PLACE TOOLS AND KEY ASIDE
						  ENDS—WITH RELEASE OF KEY

FFF	U	MAA	MNFKR01	MNFKR04	286	KEY,REMOVE,TAPERED MACHINE,HAMMER AND PUNCH REQUIRED
						  STARTS—WITH REACH TO TOOLS
						  INCLUDES—ALL MOTIONS NECESSARY TO GET TOOLS, DRIVE KEY FROM SEAT,AND PLACE TOOLS AND KEY ASIDE
						  ENDS—WITH RELEASE OF KEY

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	NAA	MNFLCXX	MNFLCXX	VARIABLE	LOCK(LATCH),CLOSE AND LOCK STARTS—WITH REACH TO LOCK OR LATCH INCLUDES—ALL MOTIONS NECESSARY TO CLOSE LOCK OR LATCH ENDS—WITH RELEASE OF LOCK,LATCH,OR KEY
					85	CASE 01 PADLOCK,KEY-OPERATED,ATTACH AND LOCK
					159	02 PADLOCK,COMBINATION,ATTACH AND LOCK
					49	03 MOUNTED LOCK,0-90 DEGREE KEY TURN
					77	04 MOUNTED LOCK 90-360 DEGREE KEY TURN
					109	05 MOUNTED LOCK,COMBINATION TYPE
					91	06 SUITCASE TYPE LATCH
					46	07 HOOK AND EYE TYPE LATCH
FFF	U	NAA	MNFLOXX	MNFLOXX	VARIABLE	LOCK(LATCH),OPEN AND MOVE ASIDE STARTS—WITH REACH TO LOCK OR LATCH INCLUDES—ALL MOTIONS NECESSARY TO OPEN LOCK OR LATCH AND MOVE ASIDE ENDS—WITH RELEASE OF LOCK OR LATCH
					163	CASE 01 PADLOCK,KEY OPERATED
					388	02 PADLOCK,COMBINATION
					96	03 MOUNTED LOCK,0-90 DEGREE KEY TURN
					149	04 MOUNTED LOCK,90-360 DEGREE KEY TURN
					317	05 MOUNTED LOCK,COMBINATION TYPE
					77	06 HASP TYPE LATCH
					26	07 SLIDE OR SWING TYPE LATCH
					38	08 CAM TYPE SUITCASE LATCH
					21	09 TURN LATCH
					38	10 HOOK AND EYE TYPE LATCH
AF	U	NAO	BXCL001	MNFLT01	48	LATCH,TURN TO CLOSE BOX OR CONTAINER STARTS—WITH REACH TO LATCH WITH LEFT HAND AND TO HASP WITH RIGHT HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE HASP OVER LOCKING LATCH AND TURN LATCH TO SECURE LID ON BOX ENDS—WITH RELEASE OF CLOSED LATCH
AF	U	NAO	BXOL001	MNFLT02	47	LATCH,TURN TO OPEN BOX OR CONTAINER STARTS—WITH REACH TO LATCH INCLUDES—ALL THE MOTIONS NECESSARY TO TURN LATCH AND RELEASE HASP ENDS—WITH RELEASE OF HASP
NF	U	NAF	567	MNFPA01	173	PASTE,APPLY WITH BRUSH STARTS—WITH APPLICATOR BRUSH IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO DIP BRUSH IN PASTE,WIPE OFF EXCESS ON LIP OF CAN, APPLY PASTE TO OBJECT/SURFACE AND RETURN BRUSH TO CAN ENDS—WITH HAND ON BRUSH AND BRUSH IN CAN CONDITIONS—DIP ONE TIME-APPLY WITH THREE NINE INCH STROKES FORWARD AND THREE NINE INCH MOVES BACK TO START POINT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	MMFPIXX	MMFPIXX	VARIABLE	PIN,INSTALL,VARIOUS TYPES
						STARTS—WITH REACH TO PIN
						INCLUDES—ALL MOTIONS NECESSARY TO GET PIN(S)
						AND TOOLS,INSTALL PIN(S),AND PLACE TOOL ASIDE
						ENDS—WITH RELEASE OF TOOL
						CONDITIONS—PARTS AND TOOLS WITHIN 9—15 INCHES
						OF USAGE POINT
					210	CASE 01 SINGLE COTTER PIN TO .125 INCH DIAMETER,ENDS SPREAD BUT NOT FLATTENED AGAINST ASSEMBLY
					232	02 SINGLE COTTER PIN,.125-.250 INCH DIAMETER,ENDS SPREAD BUT NOT FLATTENED AGAINST ASSEMBLY
					264	03 FIRST OF A SERIES OF COTTER PINS,.125-.250 INCH DIAMETER,ENDS SPREAD BUT NOT FLATTENED AGAINST ASSEMBLY
					360	04 SINGLE COTTER PIN TO .125 INCH DIAMETER,ENDS SPREAD AND FLATTENED AGAINST ASSEMBLY
					390	05 SINGLE COTTER PIN,.125-.250 INCH DIAMETER,ENDS SPREAD AND FLATTENED AGAINST ASSEMBLY
					422	06 FIRST OF A SERIES OF COTTER PINS,.125-.250 INCH DIAMETER,ENDS SPREAD AND FLATTENED AGAINST ASSEMBLY
					311	07 SINGLE DOWELL OR CYLINDRICAL PIN WITH HAMMER,MAXIMUM .50 INCH DRIVE FIT
					63	08 SINGLE PIN OR OTHER CYLINDRICAL PART TO 4 INCHES LONG AND 1 INCH DIAMETER CLOSE FIT,NO BINDING,NO TOOLS REQUIRED
					129	09 SINGLE TAPER PIN,LOOSE FIT,NO TOOLS
					195	10 SINGLE TAPER PIN,TIGHT FIT,USE HAMMER
					91	11 SINGLE STRAIGHT PIN,INSERT IN CLOTH OR SIMILAR MATERIAL
					154	12 SINGLE SAFETY PIN
FFF	U	MAA	MMFPPO2	MMFPPO1	40	PIN,PREPARE TO PRESS(REMOVAL)
						STARTS—WITH MOVE PUNCH TO LOCATION
						INCLUDES—POSITION PUNCH TO PIN OR CYLINDRICAL PART AND REMOVE PUNCH AFTER PRESS IS COMPLETE
						ENDS—WITH PUNCH CLEAR OF HOLE AND IN HAND
						CONDITIONS—APPLIES TO PIN OR CYLINDRICAL PART TO 1 INCH DIAMETER.DOES NOT INCLUDE GET PUNCH OR LAY ASIDE PART
FFF	U	MAA	MMFPPO1	MMFPPO2	107	PIN,PREPARE TO PRESS(INSTALLATION)
						STARTS—WITH REACH TO PIN OR CYLINDRICAL PART
						INCLUDES—ALL MOTIONS NECESSARY TO GET PIN OR CYLINDRICAL PART,DIP IN LUBRICANT,AND PLACE TO LOCATION FOR PRESSING
						ENDS—WITH PART IN POSITION FOR PRESSING
						CONDITION—APPLIES TO PIN OR CYLINDRICAL PART TO ONE INCH DIAMETER

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DMMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

FFF	U	MAA	MMFPRXX	MMFPBXX	VARIABLE	PIN,REMOVE,VARIOUS TYPES
						  STARTS—WITH REACH TO TOOL OR PART
						  INCLUDES—ALL MOTIONS NECESSARY TO GET TOOL
						    REMOVE PIN OR PART,AND LAY ASIDE TOOL AND PIN
						  ENDS—WITH RELEASE OF TOOL
						  CONDITION—PARTS AND TOOLS WITHIN 9—15 INCHES
						    OF USAGE POINT

					203	CASE 01 FIRST OR SINGLE COTTER PIN,TO .125
						        INCH DIAMETER,ENDS SPREAD,NOT
						        FLATTENED AGAINST ASSEMBLY

					288	02 FIRST OR SINGLE COTTER PIN,.125—.250
						        INCH DIAMETER,ENDS SPREAD,NOT
						        FLATTENED AGAINST ASSEMBLY

					349	03 COTTER PIN TO .125 INCH DIAMETER,ENDS SPREAD AND FLATTENED AGAINST ASSEMBLY
					456	04 COTTER PIN,.125—.250 IN. DIAMETER ENDS SPREAD AND FLATTENED AGAINST ASSEMBLY

					183	05 TAPER PIN,DOWEL PIN,OR OTHER
						        CYLINDRICAL PART WITH HAMMER AND DRIFT
						        PUNCH

					39	06 FIRST CYLINDRICAL PART TO 4 INCHES
						        LONG AND 1 INCH DIAMETER,CLOSE FIT, NO
						        TOOLS REQUIRED

					43	07 FIRST OR SINGLE STRAIGHT PIN,LITTLE OR NO RESISTANCE
					116	08 FIRST OR SINGLE SAFETY PIN

FFF	U	MAA	MMFKI01	MMFRI01	271	RING(SNAP),INSTALL,INTERNAL OR EXTERNAL,UP TO
						ONE INCH FROM END OF PART USING SPECIAL SNAP
						RING PLIERS
						  STARTS—WITH GET TOOL AND SNAP RING
						  INCLUDES—ALL MOTIONS NECESSARY TO INSTALL
						    INTERNAL OR EXTERNAL SNAP RING
						  ENDS—WITH PLACE PLIERS ASIDE

FFE	U	MAA	GPLPDXX	MMFRPXX	VARIABLE	PLUG(OR CAP),REMOVE,NON-THREADED PLASTIC,
						USING A SCREWDRIVER
						  STARTS—WITH GET SCREWDRIVER
						  INCLUDES—ALL MOTIONS NECESSARY TO PRY PLUG
						    WITH SCREWDRIVER AT FOUR POINTS AND REMOVE
						    PLUG
						  ENDS—WITH ASIDE PLUG AND SCREWDRIVER

					339	CASE 01 FIRST PLUG
					306	02 EACH ADDITIONAL PLUG

FFF	U	MAA	MMFKR01	MMFRR01	136	RETAINER,REMOVE,SNAP RING,INTERNAL OR EXTERNAL
						USING SNAP RING PLIERS
						  STARTS—WITH GET PLIERS
						  INCLUDES—ALL MOTIONS NECESSARY TO USE PLIERS
						    TO REMOVE INTERNAL OR EXTERNAL SNAP RING FROM
						    GROOVE UP TO ONE INCH FROM END OF PART
						  ENDS—PLACE RING AND PLIERS ASIDE

FFF	U	MAA	MMFKR04	MMFRR02	865	RETAINER,REMOVE,RING,SPRING,LOCKWIRE OR FLAT
						STEEL,USING TOOLS
						  STARTS—WITH GET TOOLS
						  INCLUDES—ALL MOTIONS NECESSARY TO REMOVE A
						    RETAINER RING,SPRING OR LOCKWIRE WITH PRY TOOL
						    AND PLIERS
						  ENDS—WITH PLACE RING ASIDE

FFF	U	MAA	MMFKR06	MMFRR03	146	RETAINER,REMOVE,SNAP ON CLIP TYPE,USING PLIERS
						  STARTS—WITH GET PLIERS
						  INCLUDES—ALL MOTIONS NECESSARY TO USE PLIERS
						    TO REMOVE CLIP TYPE RETAINER
						  ENDS—WITH PLACE RETAINER ASIDE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION

MAA	U	MAA	ONFRTXX	MNFRTXX	VARIABLE	RETAINER(TRU-ARC),INSTALL OR REMOVE
						STARTS—WITH REACH TO RING OR TRU-ARC PLIERS
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET RING
						   AND TOOL,ENGAGE TOOL AND TRU-ARC RING,SQUEEZE
						   RING AND PLACE IN SLOT,RELEASE RING,ASIDE
						   TOOL,GET PLIERS,INSERT IN RING AND REMOVE,
						   ASIDE TOOL AND RING(SIMO)
						ENDS—WITH ASIDE TOOL
						CONDITIONS—APPLIES TO BOTH EXTERNAL AND IN-
						   TERNAL GROOVES UP TO ONE INCH DEPTH

					221	CASE 01 INSTALL FIRST RING
					178	02 INSTALL EACH ADDITIONAL RING
					176	03 REMOVE FIRST RING
					133	04 REMOVE EACH ADDITIONAL RING

DL	U	MAL	H13	MNFSI01	51	STAPLE,INSTALL WITH PLIER GRIP STAPLER
						STARTS—WITH ITEM(S) TO BE STAPLED UNDER
						   CONTROL BY LEFT HAND AND STAPLER IN RIGHT HAND
						INCLUDES—ALL MOTIONS NECESSARY TO POSITION
						   STAPLER FOR STAPLING,APPLY ONE STAPLE AND
						   REMOVE STAPLER FROM SURFACE
						ENDS—WITH STAPLER IN HAND

FFF	U	MAA	MNFSR02	MNFSR01	86	STAPLE,REMOVE,3/8 OR 1/2 INCH,USING PLIER
						TYPE STAPLE REMOVER
						STARTS—WITH ONE HAND ON STAPLED OBJECT AND
						   STAPLE REMOVER IN OTHER HAND
						INCLUDES—ALL MOTIONS NECESSARY TO USE PLIER
						   TYPE STAPLE REMOVER TO REMOVE ONE STAPLE
						ENDS—WITH STAPLE REMOVED AND STAPLE REMOVER IN
						   HAND

FFF	U	MAA	MNFAAXX	MNFTAXX	VARIABLE	TAPE(ADHESIVE),ATTACH TO DESIRED POSITION
						STARTS—WITH REACH TO END OF TAPE ON ROLL
						INCLUDES—ALL MOTIONS NECESSARY TO GET TAPE
						   FROM ROLL IN DISPENSER,APPLY TO DESIRED
						   POSITION,AND SEAT WITH FINGERTIPS OR HEEL OF
						   HAND
						ENDS—WITH TAPE IN POSITION
						CONDITION—TAPE IN DISPENSER,END NOT STUCK TO
						   ROLL(EACH CASE INCLUDES A CONSTANT VALUE OF 95
						   THRU(SOURCE CODE-MNF-SS-C1)

					107	CASE 01 APPLY TAPE TO 1 INCH LONG
					116	02 APPLY TAPE 1-3 INCHES LONG
					129	06 APPLY TAPE 3-9 INCHES LONG
					142	12 APPLY TAPE 9-15 INCHES LONG
					155	18 APPLY TAPE 15-21 INCHES LONG
					168	24 APPLY TAPE 21-27 INCHES LONG

FFF	U	MAA	MNFTFXX	MNFTFXX	VARIABLE	TURNLOCK,FASTEN OR UNFASTEN(DZUS,CAMLOCK,ETC.)
						STARTS—WITH REACH TO PART
						INCLUDES—ALL MOTIONS NECESSARY TO ACCOMPLISH
						   MINOR REPOSITIONING OF PART FOR ACCESS AND TO
						   TURN LOCK UP TO 90 DEGREES TO FASTEN OR
						   UNFASTEN
						ENDS—WITH RELEASE OF TURNLOCK OR TOOL

					69	CASE 01 TURN BY HAND(LOCK WITH WINGED OR SERRATED HEAD)
					115	02 TURN WITH TOOL(INCLUDES GET AND ASIDE TOOL)

AF	U	MAO	TAG0001	MNFTG01	65	TAPE,GET FROM DISPENSER,6 INCH LENGTH OF TAPE
						STARTS—WITH REACH TO TAPE WITH RIGHT HAND AND
						   TO DISPENSER WITH LEFT HAND
						INCLUDES—ALL THE MOTIONS NECESSARY TO HOLD
						   DISPENSER WITH LEFT HAND,PULL SIX INCHES OF
						   TAPE WITH RIGHT HAND,TEAR IT FROM DISPENSER
						   AND GRASP FREE END OF TAPE WITH OTHER HAND
						ENDS—WITH TAPE HELD IN BOTH HANDS 12 INCHES
						   FROM DISPENSER

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	NAA	GJPAT01	MNFTR01	167	TAPE,REMOVE FROM ROLL STARTS—WITH REACH TO GET ROLL OF TAPE INCLUDES—ALL THE MOTIONS NECESSARY TO PULL A STRIP OF TAPE FROM A ROLL,TEAR OFF LENGTH AND ASIDE ROLL OR PIECE OF TAPE ENDS—WITH ROLL OR PIECE OF TAPE ASIDE CONDITIONS—PIECE UP TO 27 INCHES.LIMITED TO MASKING TAPE ON ROLLS TO THREE INCHES WIDE
FFE	U	NAA	GJPATA6	MNFTR02	97	TAPE,REMOVE FROM OBJECT STARTS—WITH REACH TO TAPE INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP THE END OF A PIECE OF TAPE,PULL LOOSE FROM AN OBJECT,ROLL TAPE UP AND ASIDE USED TAPE ENDS—WITH ASIDE USED TAPE CONDITIONS—APPLIES TO PIECES OF TAPE FROM ONE TO NINE INCHES LONG
FFE	U	NAA	GMCMT01	MNFTR03	191	TAPE(MASKING),REMOVE STARTS—WITH REACH FOR END OF TAPE INCLUDES—ALL THE MOTIONS NECESSARY TO GET END OF TAPE WITH HAND,HOLD OBJECT WITH OTHER HAND, PULL TAPE LOOSE FROM OBJECT AND ASIDE ENDS—WITH ASIDE TAPE CONDITION—TAPE IS 15-21 INCHES LONG
FFF	U	NAA	MNFTLXX	MNFTTXX	VARIABLE	TAPE,TEAR FROM LOOSE ROLL DISPENSER STARTS—WITH REACH TO DISPENSER INCLUDES—ALL MOTIONS NECESSARY TO HOLD DISPENSER,GET TAPE NEAR CUTTER EDGE,PULL SPECIFIED LENGTH,CUT TAPE,ASIDE DISPENSER,AND GET END OF TAPE WITH OTHER HAND ENDS—WITH TAPE IN HANDS CONDITION—EACH CASE INCLUDES A CONSTANT VALUE OF 96 TMU(SOURCE CODE MNF-TL-C1)
					98	CASE 01 GET AND TEAR TAPE,UP TO ONE INCH
					101	02 GET AND TEAR TAPE,1-3 INCH LENGTH
					105	06 GET AND TEAR TAPE,3-9 INCH LENGTH
					109	12 GET AND TEAR TAPE,9-15 INCH LENGTH
					113	18 GET AND TEAR TAPE,15-21 INCH LENGTH
					117	24 GET AND TEAR TAPE,21-27 INCH LENGTH
FFF	U	NAA	MNFSC01	MNFWC01	94	WIRE(SAFETY),CUT OFF EXCESS AND BEND END OVER, TWISTED SINGLE STRAND TO .0625 INCH DIAMETER STARTS—WITH PLIERS(WIRE TWISTERS)IN HAND INCLUDES—ALL MOTIONS NECESSARY TO USE WIRE TWISTERS TO CUT OFF EXCESS TWISTED SAFETY WIRE AND BEND END TO 180 DEGREES ENDS—WITH PLIERS IN HAND
FFF	U	NAA	MNFSIXX	MNFWIXX	VARIABLE	WIRE(SAFETY),INSERT THROUGH HOLE STARTS—WITH WIRE HELD IN LEFT HAND AND REACH TO WIRE WITH RIGHT HAND INCLUDES—ALL MOTIONS NECESSARY TO GET WIRE WITH RIGHT HAND,MOVE FROM OVER ANCHOR,ALIGN TO HOLE HORIZONTALLY,PUSH WIRE THROUGH HOLE, GRASP END OF WIRE WITH LEFT HAND,AND PULL THROUGH HOLE ENDS—WITH WIRE HELD IN LEFT HAND CONDITIONS—MAXIMUM LENGTH=27 INCHES DOUBLE STRAND WIRE TO .0625 INCH DIAMETER;NO TOOLS REQUIRED.EACH CASE INCLUDES A CONSTANT VALUE 97 TMU(SOURCE CODE MNF-SI-C1)
					108	CASE 02 INSERT 1-3 INCHES WIRE THROUGH HOLE
					113	06 INSERT 3-9 INCHES WIRE THROUGH HOLE
					118	12 INSERT 9-15 INCHES WIRE THROUGH HOLE
					123	18 INSERT 15-21 INCHES WIRE THROUGH HOLE
					128	24 INSERT 21-27 INCHES WIRE THROUGH HOLE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	MNFSOXX	MNFWOXX	VARIABLE	WIRE,OBTAIN FROM ROLL AND STRAIGHTEN END
						STARTS—WITH CUTTING PLIERS IN HAND AND REACH TO WIRE
						INCLUDES—ALL MOTIONS NECESSARY TO GET WIRE FROM ROLL,CUT TO DESIRED LENGTH,AND STRAIGHTEN END WITH FINGERS
						ENDS—WIRE AND PLIERS IN HAND
						CONDITION—APPLIES TO WIRE UP TO .0625 INCH DIAMETER
					173	CASE 06 3-9 INCHES,OBTAIN AND STRAIGHTEN
					178	12 9-15 INCHES,OBTAIN AND STRAIGHTEN
					183	18 15-21 INCHES,OBTAIN AND STRAIGHTEN
					188	24 21-27 INCHES,OBTAIN AND STRAIGHTEN
					230	30 27-33 INCHES,OBTAIN AND STRAIGHTEN
					235	36 33-39 INCHES,OBTAIN AND STRAIGHTEN
					240	42 39-45 INCHES,OBTAIN AND STRAIGHTEN
					245	48 45-51 INCHES,OBTAIN AND STRAIGHTEN
FFF	U	MAA	MNFSRO1	MNFWRO1	184	WIRE(SAFETY),REMOVE FROM FIRST STATION,SINGLE STRAND
						STARTS—WITH REACH TO DIAGONAL PLIERS
						INCLUDES—ALL MOTIONS NECESSARY TO GET DIAGONAL PLIERS,CUT SINGLE STRAND SAFETY WIRE AND REMOVE FROM FIRST LOCKING POINT,AND PLACE WIRE AND PLIERS ASIDE
						ENDS—WITH RELEASE OF WIRE AND PLIERS
FFF	U	MAA	MNFSRO3	MNFWRO2	270	WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED, FIRST STATION
						STARTS—WITH REACH TO DIAGONAL PLIERS
						INCLUDES—ALL MOTIONS NECESSARY TO CUT BOTH STRANDS OF WIRE EVERY OTHER TIME,DISENGAGE BOTH STRANDS EACH TIME AND PLACE WIRE ASIDE
						ENDS—WITH RELEASE OF WIRE AND DIAGONAL PLIERS
FFF	U	MAA	MNFSRO4	MNFWRO3	225	WIRE(SAFETY),REMOVE,DOUBLE STRAND,TWISTED ADDITIONAL STATION UP TO 6 INCHES APART
						STARTS—WITH REACH TO WIRE WITH DIAGONAL PLIERS
						INCLUDES—ALL MOTIONS NECESSARY TO CUT BOTH STRANDS OF WIRE EVERY OTHER TIME,DISENGAGE BOTH STRANDS EACH TIME AND PLACE WIRE ASIDE
						ENDS—WITH PLIERS IN HAND AND RELEASE OF WIRE
FFF	U	MAA	MNFSSXX	MNFWSXX	VARIABLE	WIRE(SAFETY),SECURE TO ANCHOR STATION WITH ONE TWIST BY HAND
						STARTS—WIRE HELD IN LEFT HAND
						INCLUDES—ALL MOTIONS NECESSARY TO MAKE FIRST TWIST IN WIRE AFTER THREADING THROUGH HOLE
						ENDS—WITH COMPLETION OF TWIST AND ONE END OF WIRE HELD IN EACH HAND
						CONDITIONS—ONE COMPLETE TWIST:NO TOOL NECESSARY:15 INCHES MAXIMUM LENGTH,DOUBLE STRAND WIRE TO .0625 INCH DIAMETER.EACH CASE INCLUDES A CONSTANT VALUE OF 68 TMU(SOURCE CODE MNF-SS-C1)
					89	CASE 01 SAFETY WIRE TO 1 INCH LONG
					113	02 SAFETY WIRE 1-3 INCHES LONG
					126	06 SAFETY WIRE 3-9 INCHES LONG
					139	12 SAFETY WIRE 9-15 INCHES LONG

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	NAA	MNFSTXX	MNFWTXX	VARIABLE	WIRE(SAFETY),TWIST BETWEEN ANCHORS WITH SAFETY WIRE PLIERS,WIRE TO .0625 INCH DIAMETER

STARTS—WITH ONE END OF WIRE IN EACH HAND
INCLUDES—ALL MOTIONS NECESSARY TO ATTACH
   SAFETY WIRE PLIERS TO WIRE,TWIST WIRE,AND
   REMOVE PLIERS
ENDS—WITH WIRE IN HAND AND PLIERS ASIDE NOT
   RELEASED
CONDITIONS—APPLICABLE TO SAFETY WIRE IN
   UNOBSTRUCTED AREA.MAXIMUM DISTANCE BETWEEN
   ANCHORS 6 INCHES.FRACTIONAL TWIST OF ENDS AT
   FINAL STATION FOR SINGLE STRAND.

252	CASE 01 ATTACH PLIERS TO WIRE,PREPARE TO TWIST,AND REMOVE PLIERS FROM WIRE (CONSTANT PORTION OF CASES 02-07)
287	02 SECURE SAFETY WIRE—ONE TWIST
304	03 SECURE SAFETY WIRE—TWO TWISTS
327	04 SECURE SAFETY WIRE—THREE TWISTS
345	05 SECURE SAFETY WIRE—FOUR TWISTS
363	06 SECURE SAFETY WIRE—FIVE TWISTS
381	07 SECURE SAFETY WIRE—SIX TWISTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAL	SPPNNXX	TNFNSXX	TABLE	NAIL,SET AND DRIVE

STARTS—WITH REACH TO GET NAIL
INCLUDES—ALL THE MOTIONS NECESSARY TO GET A
   NAIL,POSITION NAIL FOR DRIVING,GET HAMMER AND
   STRIKE NAIL,BEND TO NAILING POSITION WHEN
   REQUIRED,CHECK NAIL POSITION AND ASIDE HAMMER
ENDS—WITH ASIDE HAMMER
CONDITIONS—NAILS IN APRON POCKET

		SIZE OF NAIL	
		5-7-8 PENNY A	10-12-16 PENNY B
FIRST NAIL	A	422	529
EACH ADDITIONAL NAIL	B	182	285

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	TNFPAXX	TNFPAXX	TABLE	PRESS(ARBOR),ACTUATE TO INSTALL OR REMOVE PIN OR CYLINDRICAL PART

PRESS(ARBOR),ACTUATE TO INSTALL OR REMOVE PIN OR CYLINDRICAL PART
    STARTS—WITH PART ON ARBOR PRESS AND HAND ON HANDLE
    INCLUDES—ALL MOTIONS NECESSARY TO LOWER RAM, POSITION PART UNDER RAM,PRESS PIN IN OR OUT, AND RAISE RAM
    ENDS—WITH RAM RAISED,HAND ON HANDLE
    CONDITIONS—ONE HAND OPERATION OF PRESS HANDLE; EACH CASE CONTAINS APPROPRIATE CONSTANT VALUE FOR LOWERING AND RAISING RAM(SOURCE CODE, MNF—PA—C1 THRU MNF—PA—C7)AND WEIGHT FACTORS TO OVERCOME RESISTANCE TO HANDLE MOVEMENT;WEIGHT FACTORS FOR POSITIONING PART UNDER RAM NOT INCLUDED

DEPTH OF PRESS 1/2-3/4 INCH — DIAMETER OF PIN(INCHES)

DISTANCE PART MOVED TO ALIGN UNDER RAM		1/8 A	1/4 B	3/8 C	1/2 D
TO 1 INCH	A	135	144	144	149
1-3 INCHES	B	138	147	147	152
3-9 INCHES	C	143	152	152	157
9-15 INCHES	D	148	157	157	162
15-21 INCHES	E	153	162	162	167
21-27 INCHES	F	158	167	167	172

		5/8 E	3/4 F	7/8 G	1.0 H
TO 1 INCH	A	149	149	158	—
1-3 INCHES	B	152	152	161	161
3-9 INCHES	C	157	157	166	166
9-15 INCHES	D	162	162	171	171
15-21 INCHES	E	167	167	176	176
21-27 INCHES	F	172	172	181	181

DEPTH OF PRESS 3/4-1 1/4 INCHES — DIAMETER OF PIN(INCHES)

DISTANCE PART MOVED TO ALIGN UNDER RAM		1/8 A	1/4 B	3/8 C	1/2 D
TO 1 INCH	G	152	162	164	164
1-3 INCHES	H	155	165	167	167
3-9 INCHES	J	160	170	172	172
9-15 INCHES	K	165	175	177	177
15-21 INCHES	L	170	180	182	182
21-17 INCHES	M	175	185	187	187

		5/8 E	3/4 F	7/8 G	1.0 H
TO 1 INCH	G	258	258	263	—
1-3 INCHES	H	261	261	266	266
3-9 INCHES	J	266	266	271	271
9-15 INCHES	K	271	271	276	276
15-21 INCHES	L	276	276	281	281
21-27 INCHES	M	281	281	286	286

DEPTH OF PRESS — DIAMETER OF PIN(INCHES)

DISTANCE PART MOVED TO ALIGN UNDER RAM		1/8 A	1/4 B	3/8 C	1/2 D
TO 1 INCH	N	329	357	367	448
1-3 INCHES	P	332	360	370	451
3-9 INCHES	R	337	365	375	456
9-15 INCHES	S	342	370	380	461
15-21 INCHES	T	347	375	385	466
21-27 INCHES	U	352	380	390	471

	5/8	3/4	7/8	1.0

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	TNFPAXX	TNFPAXX		

		E	F	G	H
TO 1 INCH	N	453	453	453	—
1-3 INCHES	P	456	456	456	471
3-9 INCHES	R	461	461	461	476
9-15 INCHES	S	466	466	466	481
15-21 INCHES	T	471	471	471	486
21-27 INCHES	U	476	476	476	491

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFF	U	MAA	TNFSAXX	TNFWIXX	TABLE	WIRE(SAFETY),INSTALL,TWO-STRAND TWISTED BETWEEN UNOBSTRUCTED ANCHORS,WIRE TO .0625 INCH DIAMETER

STARTS—WITH REACH TO SAFETY WIRE,PLIERS IN HAND
INCLUDES—ALL MOTIONS NECESSARY TO GET SAFETY WIRE FROM ROLL,THREAD THROUGH FIRST ANCHOR POINT,TWIST BETWEEN ANCHOR POINTS,THREAD THROUGH SUBSEQUENT ANCHOR POINTS AND TWIST,CUT OFF EXCESS WIRE AND BEND END AFTER FINAL TWIST
ENDS—WITH PLIERS IN HAND
CONDITIONS—APPLIES TO SAFETY WIRE INSTALLATION WITH SAFETY WIRE PLIERS(WIRE TWISTERS).TABLE VALUES NOT APPLICABLE TO SPECIFIC SAFETY WIRE TECHNIQUES,E.G.,TURNBUCKLE.

TOTAL ANCHOR STATIONS		DISTANCE BETWEEN ANCHORS(INCHES)		
		0.5-1.5	1.5-2.5	2.5-3.5
		A	B	C
2	A	1269	1317	1404
3	B	1740	1901	1975
4	C	2231	2449	2546
5	D	2727	2992	3154
6	E	3326	3540	3833
7	F	3835	4083	4422
8	G	4349	4513	5011
9	H	4858	5378	5700
10	J	5367	5944	6308
11	K	5881	6505	6987
12	L	6390	7071	7666
13	M	6899	7623	8255
14	N	7450	8166	8844
15	P	7959	8596	9433
16	Q	8468	9026	10022
17	R	8982	9891	10820
18	S	9815	10756	11499
19	T	10342	11322	12088
20	U	10874	11888	12677
21	V	11401	12449	13266
22	W	11928	13010	13855
23	X	13242	13576	14444
24	Y	13722	14142	15033

		3.5-4.5	4.5-5.5	5.5-6.5
		D	E	F
2	A	1445	1481	1522
3	B	2034	2130	2243
4	C	2890	2962	3044
5	D	3479	3611	3765
6	E	4068	4260	4486
7	F	4924	5092	5287
8	G	5513	5741	6008
9	H	6102	6390	6729
10	J	6958	7222	7530
11	K	7547	7871	8251
12	L	8136	8520	8972
13	M	8992	9352	9773
14	N	9581	10001	10494
15	P	10170	10650	11215
16	Q	11026	11482	12016
17	R	11615	12131	12737
18	S	12204	12780	13458
19	T	13060	13612	14259
20	U	13649	14261	14980
21	V	14238	14910	15701
22	W	15094	15742	16502
23	X	15683	16391	17223
24	Y	16272	17040	17944

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	SPLTUXX	SNFTCXX	VARIABLE	TAPE(PLASTIC),CUT PIECE FROM ROLL

STARTS—WITH REACH TO GET ROLL OF TAPE
INCLUDES—ALL THE MOTIONS NECESSARY TO GET ROLL
OF TAPE AND PULL OFF LENGTH,GET SCISSORS AND
CUT TAPE,ASIDE ROLL AND SCISSORS,PICK UP PIECE
OF TAPE
ENDS—WITH PICK UP PIECE OF TAPE

192   CASE 01 UNROLL 12 INCHES AND CUT
42   02 UNROLL EACH ADDITIONAL 12 INCHES(ADD
              TO CASE 01)

| NAA | U | NAA | ONFSCXX | SNFWIXX | VARIABLE | WIRE(SAFETY—CONTINUOUS),INSTALL |

STARTS—WITH REACH TO GET WIRE
INCLUDES—ALL THE MOTIONS NECESSARY TO GET WIRE
AND DIAGONAL PLIERS,ROLL OFF LENGTH OF WIRE,
CUT WIRE,ASIDE DIAGONAL PLIERS,FEED END OF
WIRE IN FIRST ANCHOR POINT,PULL THROUGH WITH
DUCKBILL PLIERS,PULL AND TIGHTEN WIRE AROUND
HEAD,INSERT WIRE IN SECOND ANCHOR POINT,PULL
THROUGH WITH DUCKBILL PLIERS AND HOLD,GET
OTHER END OF WIRE AND PULL AROUND HEAD BY
HAND,PRE—TWIST PIGTAIL,RELEASE WIRE HELD BY
DUCKBILL PLIERS,GRASP AND PRE—TWIST PIGTAIL
WITH DUCKBILL PLIERS AND TWIST,ASIDE DUCKBILL
PLIERS,GET DIAGONAL PLIERS AND CUT PIGTAIL,
ASIDE DIAGONAL PLIERS,GET NEEDLE NOSE PLIERS,
GRASP AND TUCK PIGTAIL,RELEASE PIGTAIL AND
ASIDE NEEDLE NOSE PLIERS
ENDS—WITH ASIDE NEEDLE NOSE PLIERS

648   CASE 01 SAFETY WIRE TWO BOLT HEADS,THREE
             INCHES APART,WIRE NOT TWISTED BETWEEN
             BOLTS
77   02 SAFETY WIRE ADDITIONAL BOLT HEAD,WIRE
             NOT TWISTED BETWEEN BOLTS

| DNA | U | NAA | ONFSCXX | SNFWRXX | VARIABLE | WIRE(SAFETY—CONTINUOUS),REMOVE |

STARTS—WITH REACH TO GET DIAGONAL PLIERS
INCLUDES—ALL THE MOTIONS NECESSARY TO GET
DIAGONAL PLIERS AND CUT PIGTAIL,HOLD PIGTAIL
WITH DIAGONAL PLIERS AND TWIST WIRE FROM
HOLES,PULL WIRE FROM HOLES WITH DIAGONAL
PLIERS,ASIDE WIRE AND DIAGONAL PLIERS
ENDS—WITH WIRE AND DIAGONAL PLIERS ASIDE

245   CASE 01 REMOVE SAFETY WIRE FROM TWO BOLTS
             THREE INCHES APART,WIRE NOT TWISTED
             BETWEEN BOLTS
65   02 REMOVE SAFETY WIRE FROM ADDITIONAL
             BOLT HEAD,WIRE NOT TWISTED BETWEEN
             BOLTS

| FFE | U | TAA | GJPHMXX | TOGNMXX | TABLE | NUMBERS,MULTIPLY(READ,TRANSPOSE) |

STARTS—WITH REACH TO GET PENCIL FROM POCKET
INCLUDES—ALL THE MOTIONS NECESSARY TO GET
PENCIL FROM POCKET,READ NUMBER(S)TO TRANSPOSE,
WRITE NUMBER(S),DRAW UNDERLINE,MULTIPLY DIGITS
MANUALLY AND WRITE,RETURN PENCIL TO POCKET
ENDS—WITH MULTIPLICATION COMPLETE,PENCIL BACK
IN POCKET

NUMBER OF DIGITS TO BE MULTIPLIED		BY NUMBER OF DIGITS		
		A 1	B 2	C 3
1	A	280		
2	B	338	534	
3	C	421	812	997
4	D	484	965	1346
5	E	560	1195	1567

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	GMCDC14	SOGDU01	492	DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK STARTS—WITH REACH TO COMBINATION LOCK INCLUDES—ALL MOTIONS NECESSARY TO OPEN COMBINATION LOCK,OPEN DRAWER(NO THUMB LATCH); CLOSE DRAWER,AND CLOSE AND SECURE LOCK ENDS—WITH RELEASE OF LOCK CONDITIONS—COMBINATION LOCK IS MOUNTED IN DRAWER.NO TIME INCLUDED FOR REPOSITIONING BODY AT CABINET OR FOR REMOVING OR PLACING OBJECTS IN DRAWER
FFE	U	MAA	GMCDC15	SOGDU02	719	DRAWER(FILING CABINET),UNLOCK,OPEN,CLOSE,AND LOCK STARTS—WITH REACH TO COMBINATION PADLOCK INCLUDES—ALL MOTIONS NECESSARY TO OPEN AND ASIDE COMBINATION PADLOCK,REMOVE RETAINER BAR, OPEN DRAWER(NO THUMB LATCH);CLOSE DRAWER REPLACE BAR,INSTALL LOCK,AND CLOSE LOCK ENDS—WITH RELEASE OF LOCK CONDITIONS—NO TIME INCLUDED FOR REPOSITIONING BODY AT CABINET OR FOR REMOVING OR INSERTING OBJECTS IN DRAWER
FFD	U	MAA	BOHCD01	BOHCD01	35	CONTAINER,DUMP PARTS STARTS—WITH CONTAINER IN HANDS UNDER CONTROL INCLUDES—ALL MOTIONS NECESSARY TO INVERT CONTAINER,DUMP PARTS,AND RETURN CONTAINER TO ORIGINAL POSITION ENDS—WITH EMPTY CONTAINER IN HANDS CONDITION—APPLICABLE TO TRAYS,TOTE PANS,ETC.OF PARTS WEIGHING TO 12.5 POUNDS
NO	U	MAD	LDPC-1B	BOHHP01	56	HOOK,PLACE IN PART,S-TYPE HOOK STARTS—WITH HOOK IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE HOOK TO HOLE IN PART,POSITION HOOK TO HOLE, SWING HOOK TO ENGAGE AND SEAT HOOK ENDS—WITH HOOK SEATED IN HOLE IN PART,HAND ON HOOK
FFD	U	MAA	BOHHA01	BOHOG01	38	OBJECT,GAIN CONTROL AFTER GET HANDFUL OF OBJECTS STARTS—WITH REGRASP OF HANDFUL OF OBJECTS INCLUDES—ALL MOTIONS NECESSARY TO GET OBJECT WITH FINGERS OF SAME HAND AND ALIGN READY FOR NEXT OPERATION ENDS—WITH OBJECT READY TO MOVE TO NEXT OPERATION CONDITION—USE FOR HANDFULL OF OBJECTS,TO PREPARE ONE OBJECT FOR NEXT OPERATION,SUCH AS GET BOLT ALIGNED TO INSTALL FROM HANDFUL OF BOLTS IN SAME HAND
DNO	U	MAD	LDPC-1C	BOHPHXX	VARIABLE	PART,HANG WITH "S" HOOK STARTS—WITH PART IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO HANG A PART(ON "S" HOOK)ON TO EDGE OF TANK ENDS—WITH PART HANGING CONDITIONS—PART AND HANGER WEIGH TO 10 POUNDS— HANG PART ON BAR OR RIM(EDGE)SUCH AS VAT OR TANK
					40	CASE 01 HANG WITH 16-INCH MOVE
					55	02 HANG WITH 30-INCH MOVE

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

FFD	U	MAA	BOMSPXX	BOMPSXX	VARIABLE	PARTS, SEPARATE BY PULLING
						  STARTS—WITH HAND ON OBJECT
						  INCLUDES—ALL MOTIONS NECESSARY TO SEPARATE A
						    SINGLE OBJECT FROM PILE OF OBJECTS
						  ENDS—WITH OBJECT IN HAND FREE OF PILE
						  CONDITION—DOES NOT INCLUDE UNTANGLING MOTIONS

					12	CASE 01 SEPARATE BY PULLING STRAIGHT OUT ON OBJECT, TO 2.5 POUNDS RESISTANCE
					25	02 SEPARATE BY PULLING STRAIGHT OUT ON OBJECT, 2.5—12.5 POUNDS RESISTANCE
					29	03 SEPARATE BY PULL WITH TWIST, 2.5—12.5 POUNDS RESISTANCE

FFE	U	MAA	RLGOB01	MOHB001	97	BOOK, OPEN TO MARKED PAGE
						  STARTS—WITH BOOK ON TABLE, HANDS AT BOOK
						  INCLUDES—ALL THE MOTIONS NECESSARY TO REACH TO FLAG AND GRASP PAGES, OPEN BOOK AT FLAG, REACH TO AND HOLD CENTER OF PAGES TO KEEP BOOK OPEN
						  ENDS—WITH BOOK OPEN AT MARKED PAGE
						  CONDITIONS—PAGE MARKED WITH PAPER CARD

FFE	U	MAA	GJPJOG5	MOHBR01	203	BOOK, REMOVE FROM AND REPLACE IN OPEN BOOKCASE
						  STARTS—WITH REACH TO BOOK
						  INCLUDES—ALL MOTIONS NECESSARY TO GET BOOK, TILT, AND SLIDE BOOK FROM BOOKCASE, ASIDE BOOK; GET BOOK, GET BOOKS IN CASE AND MOVE ASIDE TO MAKE OPENING, PLACE BOOK IN BOOKCASE, AND ALIGN BOOK
						  ENDS—WITH RELEASE OF BOOK

NO	U	MAD	LDPC1E1	MOHCD01	129	CONTAINER, DUMP PARTS
						  STARTS—WITH REACH TO CONTAINER WITH BOTH HANDS
						  INCLUDES—ALL THE MOTIONS NECESSARY TO REACH AND GRASP CONTAINER, MOVE TO TURN UPSIDE DOWN AND SHAKE TO REMOVE PARTS, ASIDE EMPTY CONTAINER
						  ENDS—WITH ASIDE CONTAINER
						  CONDITIONS—CONTAINER AND PARTS WEIGH APPROXIMATELY 20 POUNDS. CONTAINER IS WIRE BASKET OR SIMILAR.

DL	U	MAL	ECOC	MOHCOXX	VARIABLE	CLIPBOARD, OBTAIN, AFFIX, OR REMOVE DOCUMENT AND ASIDE
						  STARTS—WITH REACH TO OBTAIN THE CLIPBOARD
						  INCLUDES—ALL THE TIME NECESSARY TO OBTAIN THE CLIPBOARD, AFFIX OR REMOVE THE DOCUMENT AND PLACE THE CLIPBOARD ASIDE
						  ENDS—WITH RELEASE OF CLIPBOARD

					153	CASE 01 AFFIX DOCUMENT
					114	02 REMOVE DOCUMENT

FF	U	MAA	MOGO001	MOHD001	108	DOOR (PASSAGE), OPEN AND CLOSE WITH DOORKNOBS, PUSH OR PULL REQUIRED TO OPEN DOOR
						  STARTS—WITH BODY AT DOOR & REACH TO KNOB
						  INCLUDES—TWISTING KNOB, OPENING DOOR, WALKING THROUGH DOORWAY, & CLOSING DOOR
						  ENDS—WITH DOOR CLOSED, KNOB RELEASED, & BODY READY TO TAKE STEP
						  CONDITIONS—WALLS OR PARTITIONS MUST NOT INTERFERE WITH BODY MOTIONS

FF	U	MAA	MOGO002	MOHD002	68	DOOR (PASSAGE), OPEN AND CLOSE, WITH DOORKNOBS AND CLOSER MECHANISM. PUSH REQUIRED TO OPEN DOOR
						  STARTS—WITH BODY AT DOOR AND REACH TO KNOB
						  INCLUDES—PUSHING THE DOOR OPEN AND WALKING THROUGH DOORWAY
						  ENDS—WHEN FOOT HAS CONTACTED THE GROUND AND RESUMED ITS PORTION OF THE BODY WEIGHT
						  CONDITIONS—WALLS OR PARTITIONS MUST NOT INTERFERE WITH BODY MOTIONS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	NAA	NOGO003	MOHD003	90	DOOR(PASSAGE),OPEN AND CLOSE,WITH DOORKNOB, PULL TO OPEN,WITH AUTOMATIC CLOSER STARTS—WITH REACH TO DOORKNOB INCLUDES—ALL MOTIONS NECESSARY TO TURN KNOB, PULL DOOR OPEN,WALK THROUGH,AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR CONDITION—WALLS OR PARTITIONS MUST NOT INTERFERE WITH BODY MOTIONS
FFE	U	NAA	GNCDA01	MOHD004	75	DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PUSH TO OPEN,WITH AUTOMATIC DOOR CLOSER STARTS—WITH REACH TO DOOR HANDLE,KNOB,OR BAR INCLUDES—ALL MOTIONS NECESSARY TO PUSH DOOR OPEN,WALK THORUGH, AND RELEASE DOOR ENDS—WITH RELEASE DOOR CONDITION—APPLICABLE TO DOORS 30—36 INCHES WIDE AND 72—84 INCHES HIGH
FFE	U	NAA	GNCDA02	MOHD005	114	DOOR(PASSAGE),OPEN AND CLOSE,NO LATCH,PULL TO OPEN,WITH AUTOMATIC DOOR CLOSER STARTS—WITH REACH TO DOOR HANDLE,BAR,OR KNOB INCLUDES—ALL MOTIONS NECESSARY TO PULL DOOR OPEN,WALK THROUGH,AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR CONDITION—APPLICABLE TO DOORS 30—36 INCHES WIDE AND 72—84 INCHES HIGH
FFE	U	NAA	GNCDA03	MOHD006	91	DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE PUSH TO OPEN,WITH AUTOMATIC CLOSER STARTS—WITH REACH TO RELEASE BAR INCLUDES—ALL MOTIONS NECESSARY TO PRESS BAR TO RELEASE LATCH,PUSH DOOR OPEN,WALK THROUGH,AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR CONDITION—APPLICABLE TO DOORS 30—36 INCHES WIDE AND 72—84 INCHES HIGH
FFE	U	NAA	GNCDA04	MOHD007	127	DOOR(PASSAGE),OPEN AND CLOSE,QUICK RELEASE, PULL TO OPEN,WITH AUTOMATIC CLOSER STARTS—WITH REACH TO HANDLE,KNOB OR BAR INCLUDES—ALL MOTIONS NECESSARY TO RELEASE LATCH,PULL DOOR OPEN,WALK THROUGH AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR CONDITION—APPLICABLE TO DOORS 30—36 INCHES WIDE AND 72—84 INCHES HIGH
FFE	U	NAA	GNCDA05	MOHD008	75	DOOR(PASSAGE),OPEN AND CLOSE,TWO—WAY SWINGING STARTS—WITH REACH TO DOOR INCLUDES—ALL MOTIONS NECESSARY TO PUSH DOOR OPEN,WALK THROUGH DOOR,AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR CONDITION—APPLICABLE TO DOORS 30—36 INCHES WIDE AND 72—84 INCHES HIGH
FF	U	NAA	GNCDC05	MOHD009	111	DOOR(PASSAGE),OPEN,SLIDING STARTS—WITH REACH TO DOOR RECESS INCLUDES—ALL MOTIONS NECESSARY TO PUSH DOOR OPEN,WALK THROUGH,AND RELEASE DOOR ENDS—WITH RELEASE OF DOOR
FFE	U	NAA	GNCDC07	MOHD010	138	DOOR(PASSAGE),CLOSE,SLIDING STARTS—WITH TURN TO DOOR RECESS INCLUDES—ALL MOTIONS NECESSARY TO GET DOOR, MOVE DOOR TO CLOSED POSITION,AND TURN TO WALK AWAY ENDS—WITH BODY TURNED AWAY FROM DOOR

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

DL	U	MAL	BMMD	MOHDRO1	463	DOOR(OVERHEAD),RAISE AND LOWER,MANUALLY
						STARTS—WITH REACH TO DOOR LATCH
						INCLUDES—ALL MOTIONS NECESSARY TO UNLATCH
						  DOOR,RAISE DOOR,REACH TO PULL CHAIN ON ROPE,
						  LOWER DOOR,AND LATCH DOOR
						ENDS—WITH RELEASE OF LATCH

NF	U	MAF	3802	MOHDUO1	143	DOOR(OFFICE),UNLOCK
						STARTS—WITH REACH TO POCKET FOR KEYS
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET KEYS
						  FROM POCKET,UNLOCK DOOR,AND TURN KNOB TO RE-
						  LEASE LATCH
						ENDS—WITH KNOB AND KEYS IN HAND

FFD	U	MAA	KALEA16	MOHFIO1	135	FUSE,INSTALL IN FUSE HOLDER/BLOCK
						STARTS—WITH REACH TO GET FUSE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET FUSE
						  AND PLACE TO FUSE HOLDER,SEAT FUSE IN HOLDER
						  AT BOTH ENDS
						ENDS—WITH RELEASE SEATED FUSE
						CONDITIONS—FUSE BLOCK OR FUSE HOLDER,SNAP IN
						  TYPE

FFD	U	MAA	KALED16	MOHFRO1	83	FUSE,REMOVE FROM HOLDER/BLOCK STARTS—WITH REACH TO FUSE IN HOLDER INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP, REMOVE FUSE FROM HOLDER AND ASIDE FUSE ENDS—WITH ASIDE FUSE CONDITIONS—FUSE BLOCK/HOLDER,SNAP IN TYPE
FFD	U	MAA	MMHOGXX	MOHGOXX	VARIABLE	GATE(CONVEYOR),OPEN OR CLOSE,SINGLE GATE OR ONE SIDE OF DOUBLE GATE STARTS—WITH REACH TO GATE INCLUDES—ALL MOTIONS NECESSARY TO OPEN OR CLOSE CONVEYOR GATE ENDS—WITH GATE OPEN OR CLOSED
					66	CASE 01 OPEN CONVEYOR GATE
					168	02 OPEN GATE HAVING SAFETY CHAIN
					63	03 CLOSE CONVEYOR GATE

DL	U	MAL	BMAH	MOHHAO1	197	HOOK,ATTACH AND DETACH TO/FROM ITEM
						STARTS—WITH REACH TO HOOK ON RACK
						INCLUDES—ALL MOTIONS NECESSARY TO GET HOOK,
						  ATTACH TO ITEM,HANG ON RACK,REMOVE HOOK AND
						  ITEM FROM RACK,REMOVE ITEM FROM HOOK,AND
						  REPLACE HOOK ON RACK
						ENDS—WITH RELEASE OF HOOK

NO	U	MAO	LPDC-1V	MOHHRO1	42	HOOK("S"),REMOVE FROM PART
						STARTS—WITH REACH TO HOOK
						INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP
						  HOOK,MOVE HOOK TO BREAK CONTACT WITH PART,MOVE
						  HOOK FROM PART
						ENDS—WITH HOOK IN HAND,CLEAR OF PART

FFE	U	MAA	GMCPLXX	MOHLRXX	VARIABLE	LID,REMOVE AND REPLACE,TRASH CAN OR SIMILAR TO
						24 INCHES DIAMETER
						STARTS—WITH REACH TO LID
						INCLUDES—ALL MOTIONS NECESSARY TO GET EDGE
						  OF LID WITH BOTH HANDS,REMOVE LID FROM
						  CONTAINER,AND ASIDE LID;AND GET LID,POSITION
						  TO CONTAINER,AND PRESS LID DOWN WITH BOTH
						  HANDS
						ENDS—WITH RELEASE OF LID
						CONDITIONS—LID NOT SECURED BY LOCKING DEVICE

					84	CASE 01 REMOVE LID ONLY
					164	02 REPLACE LID ONLY
					248	03 REMOVE AND REPLACE LID,LID PLACED ASIDE
					210	04 REMOVE AND REPLACE LID,LID HELD IN HAND

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	MAA	MOHG001	MOHOG01	65	OBJECT,PENCIL,GET FROM SHIRT POCKET STARTS—WITH REACH TO PENCIL OR OTHER OBJECT IN BREAST POCKET OF SHIRT OR APRON INCLUDES—ALL NECESSARY MOTIONS TO GET OBJECT AND REGRASP ENDS—WITH OBJECT IN HAND AWAY FROM POCKET AND READY FOR USE
FF	U	MAA	MOHA001	MOHOP01	73	OBJECT,PLACE IN SHIRT POCKET,SUCH AS PENCIL, SCRIBE,OR SCALE STARTS—WITH MOVE OF OBJECT TOWARD POCKET INCLUDES—ALL NECESSARY MOTIONS TO PUT AWAY PENCIL OR SIMILAR OBJECT AFTER USING ENDS—WITH OBJECT SEATED IN POCKET
NF	U	MAF	317	MOHOS01	590	OBJECT(HEAVY),SLIDE ON FLOOR STARTS—WITH TURN TO OBJECT INCLUDES—ALL MOTIONS NECESSARY TO REACH TO OBJECT,GRASP,AND PUSH TO MOVE FIVE FEET ENDS—WITH RELEASE OF OBJECT CONDITIONS—OBJECTS WITH RESISTANCE TO 70 POUNDS ENW HANDLED BY TWO PERSONS
DL	U	MAL	BMPS	MOHPOXX	VARIABLE	OBJECT,PICK UP AND SET DOWN STARTS—WITH A STOOP TO THE OBJECT TO BE MOVED INCLUDES—ALL THE MOTIONS NECESSARY TO GAIN CONTROL OF AN OBJECT AND ARISE;STOOP,PLACE OBJECT ON FLOOR,AND ARISE ENDS—WITH ARISE FROM STOOP CONDITION—APPLIES TO OBJECTS WHICH REQUIRE SPECIAL HANDLING,DUE MORE TO PHYSICAL SIZE THAN DENSITY
					155	CASE 01 0-35 POUNDS
					176	02 35-45 POUNDS
					186	03 45-55 POUNDS
					255	04 55-65 POUNDS
					268	05 65-75 POUNDS
NF	U	MAF	3940	MOHPP01	180	PART,PICK UP AND SET DOWN STARTS—WITH STOOP TO PART INCLUDES—ALL MOTIONS NECESSARY TO STOOP, GRASP PART,ARISE,STOOP,RELEASE PART AND ARISE ENDS—WITH ARISE FROM STOOP CONDITION—APPLICABLE TO OBJECTS SUCH AS TOOLBOXES,POWER TOOLS, ETC WITH HANDLES WHICH CAN BE GRASPED WITH ONE HAND OR WITH TWO HANDS SIMULTANEOUSLY—WEIGHT NOT TO EXCEED 40 POUNDS
NO	U	MAO	LA1P1	MOHWP01	41	WIRE,PLACE THROUGH HOLE IN OBJECT STARTS—WITH WIRE AND OBJECT IN HAND INCLUDES—ALL MOTIONS NECESSARY TO POSITION END OF WIRE TO HOLE IN OBJECT AND THREAD WIRE THROUGH OBJECT ENDS—WITH WIRE AND OBJECT IN HAND CONDITIONS—APPLICABLE TO ATTACHING MARKER,TAG, OR SIMILAR TO WIRE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	TOHRAXX	TOHORXX	TABLE	OBJECT,REPOSITION AT WORKPLACE BY SLIDING OR LIFTING AND TURNING,OBJECT TO 50 POUNDS WEIGHT,TURN TO 180 DEGREES

STARTS—WITH REACH TO OBJECT
INCLUDES—ALL MOTIONS NECESSARY TO REPOSITION
   OBJECT
ENDS—WITH RELEASE OF OBJECT

	DEGREES OBJECT TURNED			
	TO 90		90-180	
	WEIGHT OF OBJECT(POUNDS)			
	TO 20	20-50	TO 20	20-50
	A	B	C	D
LIFT ONE END OF OBJECT,TILT OVER, AND SLIDE TO POSITION ABOUT HORIZONTAL AXIS — A	52	105	76	133
ROLL OBJECT BY HAND ABOUT THE HORIZONTAL AXIS— NO LIFT OR TILT — B	44	84	65	111
LIFT CLEAR OF SURFACE,TURN OVER AND SLIDE TO POSITION ABOUT HORIZONTAL AXIS — C	66	135	73	170
LIFT CLEAR OF SURFACE,TURN OVER AND SLIDE TO POSITION ABOUT THE VERTICAL AXIS — D	64	147	86	224
TURN ABOUT THE VERTICAL AXIS— SLIDE TO POSITION— NO PICK UP OBJECT — E	29	63	51	100

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	TOHRAXX	TOHOTXX	TABLE	OBJECT,TURN ABOUT HORIZONTAL OR VERTICAL AXIS TO 180 DEGREES,OBJECT ATTACHED TO STAND OR FIXTURE,EFFECTIVE NET RESISTANCE(ENR) TO 50 POUNDS

STARTS—WITH REACH TO THE OBJECT
INCLUDES—ALL MOTIONS NECESSARY TO ROTATE AN
   OBJECT WHICH IS ATTACHED TO A STAND OR FIXTURE
ENDS—WITH RELEASE OF OBJECT
CONDITIONS—DOES NOT INCLUDE TIME TO LOOSEN OR
   TIGHTEN KNOBS OR OTHER HOLDING DEVICES

		DEGREES OBJECT TURNED					
		TO 90			90-180		
ENR (POUNDS)		RADIUS OF OBJECT TURNED(INCHES)					
		TO 6	6-12	12-18	TO 6	6-12	12-18
		A	B	C	D	E	F
TO 2.5	A	22	27	49	26	39	46
2.5-10	B	25	30	42	29	42	49
10-20	C	30	35	47	34	47	54
20-30	D	50	55	67	54	57	74
30-40	E	55	60	72	59	72	79
40-50	F	60	65	77	64	77	84

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	ITEECGC	SOMBOXX	VARIABLE	BOOK,OBTAIN FROM OPEN SHELF AND RETURN

STARTS—WITH READ IDENTIFICATION OF BOOKS ON
  SHELF
INCLUDES—ALL MOTIONS NECESSARY TO LOCATE BOOK,
  REMOVE FROM SHELF,GET MARKER PAD,WRITE BOOK
  NUMBER(THREE DIGITS)ON MARKER,INSERT MARKER
  PAD IN BOOK SLOT ON SHELF,PLACE BOOK TO CARRY,
  PLACE BOOK ON TABLE OR WORK BENCH,GET BOOK
  FROM TABLE TO RETURN TO SHELF,REMOVE MARKER
  PAD,RETURN BOOK TO SHELF,AND TEAR SHEET FROM
  MARKER PAD
ENDS—WITH ASIDE MARKER PAD
CONDITIONS—TIME TO WALK BETWEEN BOOK SHELF AND
  WORK AREA NOT INCLUDED

| | | | | | 844 | CASE 01 OBTAIN AND RETURN BOOK WITHOUT BEND OR STOOP |
| | | | | | 966 | 02 OBTAIN AND RETURN BOOK,BEND OR STOOP AT BOOK SHELF REQUIRED |

| FFE | U | MAA | IAESP01 | SOMOHXX | VARIABLE | OBJECT,HANG ON HOOK |

STARTS—WITH BEND TO HOOKS IN STORAGE
INCLUDES—ALL THE MOTIONS NECESSARY TO BEND AND
  GET HOOKS(FOUR),ARISE FROM BEND,TURN,PLACE
  HOOKS ON CART OR BENCH,GET HOOK AND PART
  (OBJECT),POSITION OBJECT TO HOOK,PLACE OBJECT
  ON HOOK,MOVE HOOK TO CHAIN,GET RING ON
  CONVEYOR,PLACE HOOK ON RING,RELEASE
ENDS—WITH HOOK ON RING
CONDITIONS—BASED ON GETTING FOUR HOOKS FROM
  STORAGE PER BEND

| | | | | | 414 | CASE 01 PLACE FIRST OBJECT ON HOOK |
| | | | | | 165 | 02 PLACE EACH ADDITIONAL OBJECT ON HOOK |

| DL | U | MAL | BMHS | SOMPMXX | VARIABLE | PLYWOOD,MANHANDLE |

STARTS—WITH WALK 2 PACES TO PLYWOOD STACK
INCLUDES—MOVEMENT OF SHEET(S) OF PLYWOOD AS
  FOLLOWS—FIRST WORKER SLIDES THE SHEET(S)TOWARD
  THE SECOND WORKER.THE SECOND WORKER GRASPS
  THE SHEET(S) AND BOTH WORKERS MOVE WITH THE
  SHEET(S) TO THE FORK BLADES,HAND CART OR OTHER
  STACK.BOTH WORKERS RELEASE THE SHEET(S) ON THE
  FORK BLADES,HAND CART OR OTHER STACK AND ALIGN
  IT WITH PREVIOUSLY PLACED SHEETS
ENDS—WITH TURN FROM STACK
CONDITION—VALUES SHOWN APPLY TO EACH MOVEMENT
  OF SHEET(S) TO FORK BLADES,CART,OR STACK

					580	CASE 01 SHEET(S),4X6 FEET
					589	02 SHEET(S),4X8 FEET
					616	03 SHEET(S),4X10 FEET
					634	04 SHEET(S),4X12 FEET

| FFE | U | MAA | GECPM01 | SOMPR01 | 123 | PART,REMOVE WITH PRY TOOL |

STARTS—WITH REACH TO TOOL
INCLUDES—ALL MOTIONS NECESSARY TO GET TOOL,
  POSITION UNDER PART,APPLY PRESSURE TO TOOL,GET
  PART,AND ASIDE PART
ENDS—WITH ASIDE TOOL
CONDITIONS—PART IS MINIMALLY ENGAGED

| NO | U | MAO | LAIR | BPAPA01 | 63 | PAINT(GREASE OR VARNISH),APPLY WITH BRUSH |

STARTS—WITH LOADED BRUSH IN HAND
INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE
  BRUSH TO PART,COAT PART(THREE STROKES WITH
  CARE AND SIX FRACTIONAL MOVES TO RETOUCH)
ENDS—WITH COATING COMPLETE
CONDITIONS—ONE-INCH STROKES WITH BRUSH USED

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	GSCPSA1	BPAPSXX	VARIABLE	PAINT,SPRAY STARTS—WITH DEPRESS TRIGGER INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE A SPRAY GUN ACROSS SURFACE TO SPRAY ONE SQUARE FOOT ENDS—WITH RELEASE OF TRIGGER CONDITIONS—PAINT ONE SQUARE FOOT W/SPRAY GUN
					81	CASE 01 FLAT SURFACE
					160	02 IRREGULAR SURFACE
MAA	U	MAA	JPAADSF	MPAPSXX	VARIABLE	PAINT,SPRAY STARTS—WITH SPRAY GUN IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO AIM SPRAY GUN,DEPRESS TRIGGER,DIRECT SPRAY OVER AREA,GET HOSE AND FLIP ASIDE,MOVE TO NEW AREA ENDS—WITH SPRAY GUN IN HAND
					998	CASE 01 PAINT 10 SQUARE FEET WITH EPOXY PAINT OR ACRYLIC LACQUER,FOUR PASSES PER SQUARE FOOT,SPRAY WITH FOUR-INCH FAN
					593	02 PAINT 10 SQUARE FEET WITH EPOXY OR ACRYLIC PRIMER,THREE PASSES PER SQUARE FOOT,SPRAY WITH SIX-INCH FAN
					978	03 PAINT 10 LINEAR FEET,CUT IN WATER LINE,FOUR PASSES PER LINEAR FOOT,SPRAY WITH 1 1/2-INCH FAN
FFH	U	MAA	KPABBAA	SPAAPXX	VARIABLE	PAINT,APPLY WITH BRUSH ATTACHED TO BOTTLE CAP STARTS—WITH REACH TO GET BOTTLE INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP AND HOLD BOTTLE WITH ONE HAND,REACH TO AND UN- SCREW CAP FROM BOTTLE WITH OTHER HAND,REMOVE BRUSH AND WIPE ON EDGE OF BOTTLE,MOVE BRUSH TO SPOT AND APPLY PAINT,RETURN BRUSH TO BOTTLE AND SCREW ON CAP,ASIDE BOTTLE ENDS—WITH ASIDE BOTTLE
					235	CASE 01 FIRST APPLICATION
					80	02 DIP BRUSH IN PAINT AND PAINT ADDITIONAL SPOT
FFE	U	MAA	RLGSCP4	SPAPAXX	VARIABLE	PAINT,APPLY WITH BRUSH STARTS—WITH REACH TO GET PAINT BRUSH INCLUDES—ALL THE MOTIONS NECESSARY TO GET PAINT BRUSH AND DIP INTO PAINT,MOVE BRUSH FROM PAINT TO SURFACE TO BE PAINTED,BRUSH PAINT ON SURFACE WITH APPROXIMATELY EIGHT STROKES, ASIDE BRUSH ENDS—WITH ASIDE BRUSH CONDITIONS—PAINT ONE SQUARE FOOT OF SURFACE WITH 1 1/2 TO 2 1/2 INCH BRUSH.DIP BRUSH IN PAINT THREE TIMES PER SQUARE FOOT.
					387	CASE 01 FIRST SQUARE FOOT
					349	02 EACH ADDITIONAL SQUARE FOOT
FFE	U	MAA	GJPFPA9	MPHDA01	212	DOCUMENT,ATTACH TO ITEM WITH RUBBER BAND STARTS—WITH REACH TO PAPER DOCUMENT INCLUDES—ALL MOTIONS NECESSARY TO GET PAPER, POSITION TO SURFACE,ROLL PAPER,GET RUBBER BAND,POSITION PAPER AND BAND TO ITEM,AND STRETCH RUBBER BAND OVER PAPER AND ITEM ENDS—WITH RELEASE OF RUBBER BAND
FFE	U	MAA	GJPFPB1	MPHDD01	159	DOCUMENT,DETACH FROM ITEM AND UNROLL,DOCUMENT SECURED WITH RUBBER BAND STARTS—WITH SIMO REACH TO DOCUMENT AND RUBBER BAND INCLUDES—ALL MOTIONS NECESSARY TO RELEASE DOCUMENT FROM ITEM BY REMOVING RUBBER BAND, PLACE DOCUMENT ON SURFACE,AND UNROLL AND HOLD DOCUMENT WITH HANDS ENDS—WITH HANDS ON DOCUMENT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	GJPFPA7	MPHDRO1	275	DOCUMENT,REMOVE FROM BAG,UNFOLD,FOLD,AND REPLACE IN BAG
						STARTS—WITH REACH TO BAG(PLASTIC OR SIMILAR)
						INCLUDES—ALL MOTIONS NECESSARY TO GET BAG, REMOVE PAPER CLIP FROM BAG,REMOVE DOCUMENT FROM BAG,AND UNFOLD DOCUMENT;AND REGRASP DOCUMENT,FOLD DOCUMENT(ONE FOLD),PLACE DOCUMENT IN BAG,AND INSTALL PAPER CLIP ON BAG
						ENDS—WITH BAG IN HAND
						CONDITIONS—DOCUMENT IN BAG IS EASILY GRASPED, NO INSERTION OF FINGERS IN BAG REQUIRED TO REMOVE DOCUMENT
FFE	U	MAA	GJPFPA6	MPHDRO2	128	DOCUMENT,REMOVE FROM AND RETURN TO PLASTIC BAG
						STARTS—WITH REACH TO PLASTIC BAG
						INCLUDES—ALL MOTIONS NECESSARY TO GET BAG, REMOVE DOCUMENT,ASIDE BAG AND DOCUMENT;GET BAG,GET DOCUMENT,PLACE IN BAG,AND FOLD CORNER OF BAG
						ENDS—WITH BAG IN HAND
						CONDITIONS—DOCUMENT IN BAG IS EASILY GRASPED, NO INSERTION OF FINGERS IN BAG REQUIRED;NO TIME IS INCLUDED FOR FOLDING OR OTHERWISE PREPARING DOCUMENT FOR REPLACING IN BAG.
FFD	U	MAA	BPKOBO1	BPKBOO1	25	BAG(PAPER),OPEN,PREPARATORY TO PLACE OBJECT IN BAG
						STARTS—WITH BAG IN ONE HAND AND FINGER OF OTHER HAND POSITIONED TO OPEN BAG
						INCLUDES—ALL MOTIONS NECESSARY TO INSERT FINGERS AND SPREAD OPEN
						ENDS—WITH BAG OPEN AND HELD IN BOTH HANDS
						CONDITION—APPLIES TO FLAT PAPER BAG
FFD	U	MAA	BPKCPO1	BPKCCXX	VARIABLE	CONTAINER(PLASTIC),CLOSE,SNAP-ON LID
						STARTS—WITH ONE HAND ON CONTAINER AND LID IN OTHER HAND
						INCLUDES—ALL MOTIONS NECESSARY TO CLOSE CONTAINER WITH SNAP-ON LID TO 7-INCH DIAMETER
						ENDS—WITH ONE HAND ON CONTAINER AND ONE HAND ON LID
					20	CASE 01 LID,1-4 INCHES DIAMETER
					29	02 LID,4-7 INCHES DIAMETER
FFD	U	MAA	BPKOCXX	BPKCOXX	VARIABLE	CAN,OPEN WITH STATIONARY CRANK TYPE CAN OPENER
						STARTS—WITH LEFT HAND ON CAN AND RIGHT HAND ON OPENER CUTTER HANDLE
						INCLUDES—ALL MOTIONS NECESSARY TO RAISE CUTTER,SLIDE CAN UNDER CUTTER,LOWER AND LOCK CUTTER,TURN CRANK TO OPEN CAN AND RAISE CUTTER TO RELEASE CAN
						ENDS—WITH LEFT HAND ON CAN AND RIGHT HAND ON OPENER CUTTER HANDLE
					178	CASE 01 OPEN CAN,3-5 INCHES DIAMETER
					226	02 OPEN CAN,5-7 INCHES DIAMETER
FFD	U	MAA	BPKOPO1	BPKCRO1	39	COVER,REMOVE FROM PLASTIC CONTAINER,SNAP ON COVER,1-7 INCHES DIAMETER
						STARTS—WITH ONE HAND ON CONTAINER AND OTHER HAND ON LID
						INCLUDES—ALL MOTIONS NECESSARY TO APPLY PRESSURE AND DISENGAGE COVER
						ENDS—WITH ONE HAND ON CONTAINER AND COVER IN OTHER HAND

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BPKOEXX	BPKEOXX	VARIABLE	ENVELOPE,OPEN BY TEARING END
						STARTS—WITH ENVELOPE IN HANDS AND IN POSITION TO TEAR
						INCLUDES—ALL MOTIONS NECESSARY TO TEAR ENVELOPE OPEN
						ENDS—WITH ENVELOPE IN ONE HAND AND TORN OFF END IN OTHER HAND
						CONDITION—LIMITED TO PARTS ENVELOPES MADE OF PAPER OR SIMILAR MATERIAL WITH NORMAL TEAR RESISTANCE
					24	CASE 01 ENVELOPE,1-5 INCHES WIDE
					28	02 ENVELOPE,5-9 INCHES WIDE
FFD	U	MAA	BPKJC01	BPKJC01	62	JAR,CLOSE,SCREW TYPE LID
						STARTS—WITH JAR IN ONE HAND AND THE LID IN THE OTHER HAND POSITIONED,READY TO START
						INCLUDES—ALL MOTIONS NECESSARY TO SCREW LID ON JAR
						ENDS—WITH ONE HAND ON JAR AND ONE HAND ON LID
						CONDITION—LIMITED TO JARS WITH SCREW TYPE LID THAT CAN BE CLOSED WITH ONE HAND WHILE HOLDING JAR WITH OTHER HAND
FF	U	MAA	BPKJO01	BPKJO01	66	JAR,OPEN,SCREW TYPE LID
						STARTS—WITH ONE HAND ON JAR AND OTHER HAND ON LID
						INCLUDES—ALL MOTIONS NECESSARY TO UNSCREW LID BY HAND
						ENDS—WITH LID UNSCREWED,STILL IN HAND,AND OTHER HAND ON JAR
						CONDITION—LIMITED TO JARS WITH SCREW TYPE LID THAT CAN BE OPENED WITH ONE HAND WHILE HOLDING JAR WITH OTHER HAND
FFD	U	MAA	BPKCTXX	BPKTCXX	VARIABLE	TAPE,CUT WITH KNIFE TO OPEN PACKAGE,BOX,ETC.
						STARTS—WITH KNIFE IN HAND NEAR STARTING POINT AND OTHER HAND ON PACKAGE
						INCLUDES—ALL MOTIONS NECESSARY TO INSERT KNIFE AND MAKE ONE CUT
						ENDS—WITH KNIFE IN ONE HAND AND OTHER HAND ON PACKAGE
					52	CASE 01 CUT TO 6 INCHES IN LENGTH
					58	02 CUT 6-12 INCHES IN LENGTH
					62	03 CUT 12-18 INCHES IN LENGTH
					66	04 CUT 18-24 INCHES IN LENGTH
					69	05 CUT 24-30 INCHES IN LENGTH
					73	06 CUT 30-36 INCHES IN LENGTH
FFD	U	MAA	MPKOBXX	MPKBOXX	VARIABLE	BOX,OPEN
						STARTS—WITH REACH TO BOX
						INCLUDES—ALL MOTIONS NECESSARY TO GET BOX IN POSITION AND OPEN FLAPS
						ENDS—WITH HANDS ON FLAPS
					100	CASE 01 FLAP TYPE BOX,NOT SEALED,NOT INTERLOCKED,LARGEST DIMENSION OF BOX TOP UP TO 6 INCHES
					112	02 FLAP TYPE BOX,NOT SEALED,NOT INTERLOCKED,LARGEST DIMENSION OF BOX TOP 6-12 INCHES
					97	03 BOX,TUCK IN TYPE LID,HINGED ACTION ON ONE SIDE,NOT SEALED,BOX UP TO 6 INCHES WIDE AND 12 INCHES LONG
					192	04 BOX,SEALED WITH TAPE,TUCK IN TYPE LID, HINGED ACTION ON ONE SIDE,NO TAPE ON ENDS,MAXIMUM DIMENSIONS=6X12 INCHES (INCLUDES TIME FOR CUTTING TAPE WITH KNIFE)

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFO	U	MAA	MPKTBXX	MPKBTXX	VARIABLE	BAG(PAPER),TEAR TO OPEN STARTS—WITH REACH TO BAG INCLUDES—ALL MOTIONS NECESSARY TO GET BAG AND TEAR ACROSS TOP ENDS—WITH BAG IN HAND
					86	CASE 01 TEAR BAG,UP TO 6 INCHES ACROSS TOP
					90	02 TEAR BAG,6—12 INCHES ACROSS TOP
					94	03 TEAR BAG,12—18 INCHES ACROSS TOP
					98	04 TEAR BAG,18—24 INCHES ACROSS TOP
NAA	U	NAA	OPKCHXX	MPKCCXX	VARIABLE	CAN(HERMETICALLY SEALED),CLOSE OR OPEN STARTS—WITH REACH TO CAN INCLUDES—ALL THE MOTIONS NECESSARY TO REMOVE WINDING KEY FROM CAN,UNWIND STRIP WITH KEY, ASIDE STRIP AND LID;OR REPLACE LID ON CAN AND SEAL WITH HAND PRESSURE ENDS—WITH LID IN PLACE CONDITION—HERMETICALLY SEALED,KEY WIND CAN TO TWO POUNDS CAPACITY
					917	CASE 01 OPEN CAN WITH KEY
					205	02 CLOSE CAN
FFO	U	MAA	MPKOCXX	MPKCOXX	VARIABLE	CAN(METAL),OPEN WITH STATIONARY CRANK TYPE CAN OPENER,EMPTY CONTENTS,AND ASIDE CAN STARTS—WITH REACH TO CAN INCLUDES—ALL MOTIONS NECESSARY TO GET CAN,OPEN WITH CRANK TYPE OPENER,EMPTY CAN AND PLACE CAN ASIDE ENDS—WITH RELEASE OF CAN CONDITION—EACH CASE INCLUDES A CONSTANT VALUE OF 182 THRU FOR OPENING CAN WITH CAN OPENER (SOURCE CODE MPK-OC-C1),CAN DIAMETER 3—5 INCHES
					242	CASE 01 OPEN AND EMPTY—ASIDE CAN 3—9 INCHES
					258	02 OPEN AND EMPTY—ASIDE CAN 9—15 INCHES
					276	03 OPEN AND EMPTY—ASIDE CAN 15—21 INCHES
NAA	U	NAA	OPKCSXX	MPKCSXX	VARIABLE	CAN,SCREW CAP ON AND OFF STARTS—WITH REACH TO CAN INCLUDES—ALL THE MOTIONS NECESSARY TO UNSCREW CAP BY HAND,SELECT TOOL TO REMOVE METAL SEAL WHEN REQUIRED AND PIERCE AND REMOVE SEAL,RE- PLACE CAP,TIGHTEN WITH HAND PRESSURE ENDS—WITH CAP IN PLACE
					211	CASE 01 WITHOUT SEAL TO ONE GALLON CAPACITY
					378	02 WITH METAL SEAL TO ONE GALLON CAPACITY
					290	03 WITHOUT SEAL TO FIVE GALLON CAPACITY
					457	04 WITH METAL SEAL OVER ONE GALLON TO FIVE GALLON CAPACITY
NO	U	MAO	LTUM1F1	MPKD001	170	DRUM(STORAGE),OPEN STARTS—WITH REACH TO LID WITH BOTH HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP LID WITH BOTH HANDS,ROCK LID TO LOOSEN,DIS- ENGAGE LID FROM DRUM,PLACE LID ASIDE,RELEASE ENDS—WITH LID ASIDE
NAA	U	NAA	OPKEOXX	MPKEOXX	VARIABLE	ENVELOPE(PARTS),OPEN AND REMOVE CONTENTS STARTS—WITH REACH TO ENVELOPE INCLUDES—ALL THE MOTIONS NECESSARY TO READ NOMENCLATURE TO VERIFY CONTENTS,TEAR ENVELOPE WITH CARE AND EXTRACT A SINGLE OBJECT ALSO INCLUDES MOTIONS TO EXTRACT EACH ADDITIONAL OBJECT ENDS—WITH LAY ASIDE OBJECT
					266	CASE 01 FIRST OBJECT
					68	02 EACH ADDITIONAL OBJECT

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

FFD	U	MAA	MPKJCXX	MPKJC01	109	JAR,CLOSE,LID SCREWED ON HAND TIGHT
						STARTS—WITH REACH TO LID
						INCLUDES—ALL MOTIONS NECESSARY TO GET LID,
						  TIGHTEN ON JAR HAND TIGHT,AND PLACE JAR ASIDE
						ENDS—WITH RELEASE OF JAR
						CONDITION—LIMITED TO JARS WITH SCREW TYPE LIDS
						  THAT CAN BE CLOSED WITH ONE HAND WHILE HOLDING
						  JAR WITH OTHER HAND

FFD	U	MAA	MPKJOXX	MPKJO01	113	JAR,OPEN,SCREW TYPE LID
						STARTS—WITH REACH TO JAR
						INCLUDES—ALL MOTIONS NECESSARY TO GET JAR;
						  UNSCREW,REMOVE,AND PLACE LID ASIDE
						ENDS—WITH RELEASE OF LID
						CONDITION—LIMITED TO JARS WITH SCREW TYPE LIDS
						  THAT CAN BE REMOVED WITH ONE HAND WHILE
						  HOLDING JAR WITH OTHER HAND

FFD	U	MAA	MPKCL01	MPKLC01	306	LID,CLOSE,PRY OPEN TYPE CAN TO 6 INCHES DIAMETER
						STARTS—WITH REACH TO LID
						INCLUDES—ALL MOTIONS NECESSARY TO GET LID,
						  PLACE ON CAN,GET HAMMER,TAP LID TO SEAT,AND
						  PLACE HAMMER AND CAN ASIDE
						ENDS WITH RELEASE OF CAN

NF	U	MAF	3176	MPKLI01	160	LID,INSTALL ON CAN
						STARTS—WITH REACH TO LID
						INCLUDES—ALL THE MOTIONS NECESSARY TO OBTAIN
						  LID,PLACE ON TOP OF CAN,POSITION AND APPLY
						  PRESSURE
						ENDS—WITH RELEASE OF CAN

FFE	U	MAA	GJPLAA1	MPKLI02	1016	LID,INSTALL AND SEAL ON FIVE-GALLON CONTAINER, 16 PRY TABS
						STARTS—WITH GET HAMMER
						INCLUDES—ALL MOTIONS NECESSARY TO BEND TO
						  CONTAINER,GET LID,PLACE ON CONTAINER,PLACE
						  FOOT ON LID TO HOLD,STRIKE EACH TAB THREE
						  BLOWS TO SEAL LID,REMOVE FOOT FROM LID,AND
						  ARISE
						ENDS—WITH ASIDE HAMMER

FFD	U	MAA	MPKOLQ1	MPKLP01	382	LID,PRY OFF CAN TO 6-INCH DIAMETER
						STARTS—WITH REACH TO CAN
						INCLUDES—ALL MOTIONS NECESSARY TO GET CAN,MOVE
						  INTO POSITION,GET TOOL,PRY OFF LID,AND PLACE
						  TOOL AND LID ASIDE
						ENDS—WITH RELEASE OF LID AND TOOL

AF	U	MAO	BXRT001	MPKLR01	45	LID(BOX),REMOVE
						STARTS—WITH REACH TO BOX TOP
						INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP
						  TOP AND LIFT ASIDE TO TABLE
						ENDS—WITH RELEASE OF LID
						CONDITIONS—TOP LOOSE ON BOX—DOES NOT INCLUDE
						  RELEASE OR REMOVE FASTENERS

FFE	U	MAA	GJPLDA1	MPKLR02	744	LID,REMOVE FROM FIVE-GALLON CONTAINER,16 PRY TABS
						STARTS—WITH GET SCREWDRIVER
						INCLUDES—ALL MOTIONS NECESSARY TO BEND TO
						  CONTAINER,PRY TABS OUT WITH SCREWDRIVER,REMOVE
						  AND ASIDE LID AND ARISE
						ENDS—WITH ASIDE SCREWDRIVER

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	MAINSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	GPKBU12	MPKOU01	178	OBJECT,UNWRAP STARTS—WITH REACH TO GET SMALL WRAPPED OBJECT INCLUDES—ALL THE MOTIONS NECESSARY TO PUT OBJECT IN POSITION TO UNWRAP,REMOVE PAPER FROM OBJECT ENDS—WITH ASIDE PAPER CONDITIONS—PAPER WRAPPED OBJECT NOT EXCEEDING 2.5 POUNDS AND LARGEST DIMENSION DOES NOT EXCEED 12 INCHES
FFD	U	MAA	MPKUS01	MPKSC01	150	STRING,CUT AND OPEN BAG STARTS—WITH REACH TO BAG INCLUDES—ALL MOTIONS NECESSARY TO GET BAG,CUT DRAWSTRING,AND OPEN BAG ENDS—WITH BAG IN HAND CONDITION—APPLIES TO BAG WITH DRAWSTRING WITH OPENING UP TO 6 INCHES
FFD	U	MAA	MPKEEXX	TPKEUXX	TABLE	ENVELOPE,OPEN,EMPTY,AND ASIDE STARTS—WITH REACH TO ENVELOPE INCLUDES—ALL MOTIONS NECESSARY TO GET ENVELOPE,TEAR OPEN,EMPTY CONTENTS,AND PLACE ENVELOPE ASIDE ENDS—WITH RELEASE OF ENVELOPE CONDITION—EACH CASE INCLUDES CONSTANT TIME FOR TEARING ENVELOPE OPEN(SOURCE CODE MPK-EE-CX)
FFD	U	MAA	MPKOBXX	TPKTCXX	TABLE	TAPE,CUT TO OPEN BOX,TAPE ON TWO SIDES AND MIDDLE OF BOX TOP STARTS—WITH REACH TO BOX INCLUDES—ALL MOTIONS NECESSARY TO MOVE BOX IN POSITION,GET KNIFE,CUT TAPE,LAY KNIFE ASIDE,OPEN TWO FLAPS,TURN BOX 90 DEGREES,AND OPEN TWO FLAPS ENDS—WITH HANDS ON FLAPS CONDITIONS—IF REQUIRED,WEIGHT FACTORS MUST BE ADDED TO THIS ELEMENT
DFF	U	MAA	GJRLRA1	SPKCOXX	VARIABLE	CAN,OPEN AND CLOSE,PRY TYPE LID TO SIX INCHES DIAMETER STARTS—WITH REACH TO CAN INCLUDES—ALL MOTIONS NECESSARY TO GET CAN,POSITION,GET TOOL,PRY OFF LID,ASIDE LID AND TOOL,GET LID,POSITION ON CAN ENDS—WITH ASIDE CAN

Envelope table (SOURCE CODE MPK-EE-CX):

		WIDTH OF ENVELOPE(INCHES)	
DISTANCE FOR GET AND ASIDE ENVELOPE(INCHES)		1—5	5—9
		A	B
3—9	A	136	150
9—15	B	148	162
15—21	C	160	174

Box table:

HEIGHT OF BOX INCHES		LARGEST DIMENSION OF BOX(INCHES)				
		TO 6	6—12	12—18	18—24	24—30
		A	B	C	D	E
TO 9	A	306	352	392	446	475
9—15	B	313	364	400	454	488
15—21	C	321	373	413	467	498
21—27	D	339	385	423	477	506

Can cases:

688	CASE 01 OPEN AND CLOSE CAN,HAMMER USED TO TAP LID TO SEAL CAN
542	02 OPEN AND CLOSE CAN,LID SEALED BY PRESSING WITH HANDS

DATA SOURCE	OCCUP-ATION	QUALITY SOURCE	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	MPLXXXX	TPLOGXX	TABLE	OBJECT,GET,PLACE TO USE,AND PLACE ASIDE

OBJECT,GET,PLACE TO USE,AND PLACE ASIDE
STARTS—WITH REACH TO OBJECT
INCLUDES—ALL MOTIONS NECESSARY TO GET CONTROL
OF AN OBJECT,MOVE OBJECT TO USE,AND MOVE THE
OBJECT ASIDE
ENDS—WITH RELEASE OF OBJECT
CONDITIONS—COLUMN A APPLIES TO MOVES OF LESS
THAN ONE INCH.TO OBTAIN CORRECT DISTANCE
RANGE,COMPUTE AVERAGE LENGTH OF REACH AND
MOVES.

		DISTANCE RANGE(INCHES)				
	F	1-3	3-9	9-15	15-21	21-27
	A	B	C	D	E	F

EASY GRASP

PLACE TO USE

		A	B	C	D	E	F
VARIABLE	A	10	18	31	43	55	68
LOOSE	B	18	26	40	53	66	80
CLOSE	C	28	36	51	63	77	91
EXACT	D	55	63	77	90	103	118

JUMBLED GRASP

PLACE TO USE

		A	B	C	D	E	F
VARIABLE	E	17	27	39	51	64	76
LOOSE	F	25	35	48	61	75	88
CLOSE	G	35	45	59	71	86	99
EXACT	H	62	72	85	98	112	126

DATA SOURCE	OCCUP-ATION	QUALITY SOURCE	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NAA	U	NAA	XPLXXXX	TPLOPXX	TABLE	OBJECT,PLACE WITH A COMBINATION OF MOVE AND/OR POSITION MOTIONS USING THE HAND(S) OR FINGERS

OBJECT,PLACE WITH A COMBINATION OF MOVE AND/OR
POSITION MOTIONS USING THE HAND(S) OR FINGERS
STARTS—WITH THE HAND ON THE OBJECT TO BE
PLACED
INCLUDES—ALL MOTIONS NECESSARY TO TRANSPORT
AND/OR PLACE THE OBJECT IN THE DESIRED
LOCATION
ENDS—WITH THE HAND ON THE OBJECT
CONDITIONS—DISTANCE RANGE COLUMN A APPLIES
TO POSITION OBJECTS ONLY WITH NO MOVE;COLUMN
B APPLIES TO MOVES OF LESS THAN ONE INCH

DESCRIPTION		DISTANCE RANGE(INCHES)					
		0	F	1-2	3-9	9-15	15-21	21-27
		A	B	C	D	E	F	G

DESCRIPTION		A	B	C	D	E	F	G
APPROXIMATE LOCATION								
NO PRESSURE	A	—	2	5	9	13	17	21
WITH PRESS.	B	—	13	15	20	24	28	31
LOOSE FIT								
SYMMETRICAL	C	6	8	11	16	21	26	31
NOT SYM.	D	9	11	14	19	24	30	35
CLOSE FIT								
SYMMETRICAL	E	16	18	21	27	31	37	42
NOT SYM.	F	20	22	25	30	35	40	45
EXACT FIT								
SYMMETRICAL	G	43	45	48	53	58	63	69
NOT SYM.	H	47	49	52	57	62	67	72
PLACE TO OTHER HAND	J	6	8	9	14	19	23	28
START THREADED FASTENER								
VISIBLE	K		26	29	34	39	44	49
BLIND	L		60	63	68	73	78	83

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWWSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	TAA	KPAACA4	MPTNCO1	67	NOZZLE(AEROSOL PAINT SPRAY CAN),CLEAR STARTS—WITH FINGER ON BUTTON,CAN INVERTED INCLUDES—ALL THE MOTIONS NECESSARY TO PRESS BUTTON,SPRAY PAINT TO CLEAR NOZZLE ENDS—WITH NOZZLE CLEARED,FINGER ON BUTTON
FF	U	TBA	BRDNRXX	BRDORXX	VARIABLE	DIGIT(S)(MIXED NUMBER),READ & RETAIN STARTS—WHEN VISION FALLS ON NUMBER INCLUDES—FOCUSING ON AND READING NUMBER ENDS—WHEN EYE COMPLETES READING NUMBER CONDITIONS—EXCLUDES EYE TRAVEL TO AND FROM NUMBER
					19	CASE 01 READ FIRST DIGIT
					9	02 READ EACH ADDITIONAL DIGIT
NF	U	MAF	2591	BRDIL01	98	ITEM,LOCATE IN COLUMN STARTS—WITH BOOK OPEN TO DESIRED PAGE AND EYES AT REST ON COLUMN INCLUDES—ALL MOTIONS NECESSARY TO PLACE FINGER ON PAGE,SCAN DOWN THE COLUMN,AND SELECT AND READ THE DESIRED ENTRY ENDS—WITH MOVE HAND FROM PAGE CONDITION—APPLICABLE TO PAGE CONTAINING COLUMNS OF APPROXIMATELY 50 ITEMS EACH SUCH AS A PARTS CATALOG
FFF	U	TBA	BRDNRXX	BRDNRXX	VARIABLE	NUMBER,READ,FIRST OR ADDITIONAL,NO EYE TRAVEL STARTS—WHEN EYE (VISION) FALLS ON NUMBER INCLUDES—FOCUSING EYE ON,READING,AND RETAINING NUMBER ENDS—WHEN EYE COMPLETES READING NUMBER(S) CONDITION—ALL NUMERICS
					12	CASE 01 FIRST DIGIT OF A NUMBER WITH ONE THROUGH FIVE DIGITS
					5	02 EACH ADDITIONAL DIGIT OF A NUMBER WITH ONE THROUGH FIVE DIGITS
					55	03 FIRST SIX DIGITS OF A NUMBER WITH SIX THROUGH TWELVE DIGITS
					7	04 EACH ADDITIONAL DIGIT OF A NUMBER WITH SIX THROUGH TWELVE DIGITS
FFF	U	MAA	BRDWI01	BRDWI01	7	WORD,READ,INDIVIDUAL WORD,ALPHA NUMERIC,OR NUMBER TO TRANSPOSE STARTS—WTIH EYES IN PLACE BUT NOT FOCUSED INCLUDES—EYE FOCUS ONLY ENDS—WITH EYES IN FOCUS CONDITIONS—ALLOW ONE OCCURRENCE FOR EACH NUMBER OF ONE THROUGH FIVE DIGITS OR FOR EACH SERIES OF FIVE DIGITS IN LARGE NUMBERS. ALLOW ONE ADDITIONAL OCCURRENCE FOR REMAINING DIGITS IN A LARGE NUMBER,IF LESS THAN FIVE.
MAA	U	MAA	BRDWS01	BRDWS01	5	WORD(SEQUENCE),READ,PER WORD STARTS—WITH FIXATION OF THE EYES INCLUDES—MOVEMENT OF THE EYES AND FOCUSING TO PERCEIVE READILY DISTINGUISHABLE WORDS ENDS—WITH COMPLETION OF MOVEMENT AND FIXATION OF THE EYES CONDITION—LIMITED TO NORMAL LETTERS AT NORMAL READING DISTANCE FROM THE EYES AND TO READING AVERAGE PROSE
NF	U	MAF	2608	MRDPF01	214	PAGE,FIND,IN MANUAL STARTS—REACH TO BOOK OR MANUAL INCLUDES—ALL MOTIONS NECESSARY TO OPEN BOOK TO DESIRED PAGE ENDS—WITH BOOK OPEN

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	TBA	TRDNAXX	TRDOAXX	TABLE	DIGIT(S),ALPHA-NUMERIC,READ & RETAIN

EYE TRAVEL TO & FROM NUMBER
  STARTS-WITH EYE TRAVEL TO NUMBER
  INCLUDES-VISION FALL ON NUMBER AND READING
    NUMBER
  ENDS-WHEN EYE COMPLETES READING AND RETURNS TO
    POINT OF ORIGIN
  CONDITION-ALSO APPLIES TO READING DECIMAL AND
    COMMON FRACTIONS

DIGITS		DISTANCE EYE TRAVEL (IN INCHES)				
		0	5	10	15	20
READ		A	B	C	D	E
1	A	19	36	52	69	86
2	B	28	45	61	78	95
3	C	37	54	70	87	104
4	D	46	63	79	96	113
5	E	55	72	88	105	122
6	F	64	81	97	114	131
7	G	73	90	106	123	140

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	TBA	TRDNAXX	TRDDNXX	TABLE	DIGIT(S),NUMERIC,READ & RETAIN,EYE TRAVEL

TO & FROM NUMBER
  STARTS-WITH EYE TRAVEL TO NUMBER
  INCLUDES-VISION FALL ON NUMBER AND READING
    NUMBER
  ENDS-WHEN EYE COMPLETES READING AND RETURNS TO
    POINT OF ORIGIN

DIGITS		DISTANCE EYE TRAVEL (IN INCHES)				
		0	5	10	15	20
READ		A	B	C	D	E
1	A	12	22	32	42	52
2	B	17	27	37	47	57
3	C	22	32	42	52	62
4	D	27	37	47	57	67
5	E	32	42	52	62	72
6	F	55	74	92	111	130
7	G	62	81	99	118	137
8	H	69	88	106	125	144
9	J	76	95	113	132	151
10	K	83	102	120	139	158
11	L	90	109	127	146	165
12	M	97	116	134	153	172

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	TBA	TRDNVXX	TRDNAXX	TABLE	NUMBER(S),ALPHA-NUMERIC,READ AND VERIFY,EYE

TRAVEL FROM DOCUMENT TO DOCUMENT
  STARTS-WITH EYE TRAVEL TO FIRST DOCUMENT FROM
    SECOND DOCUMENT
  INCLUDES-READ NUMBER ON ONE DOCUMENT AND LOOK
    TO SECOND DOCUMENT AND READ NUMBER
  ENDS-WITH EYES ON SECOND DOCUMENT AT COM-
    PLETION OF READING SECOND NUMBER
  CONDITIONS-ALSO APPLIES TO READING DECIMAL AND
    COMMON FRACTIONS

NUMBERS		DISTANCE EYE TRAVEL (IN INCHES)		
		10	15	20
READ		A	B	C
1	A	71	88	105
2	B	89	106	123
3	C	107	124	141
4	D	125	142	159
5	E	143	160	177
6	F	161	178	156
7	G	179	196	213

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	TRA	TRDNVXX	TRDNNXX	TABLE	NUMBER(S),NUMERIC,READ & VERIFY,EYE TRAVEL FROM DOCUMENT TO DOCUMENT

STARTS—WITH EYE TRAVEL TO FIRST DOCUMENT FROM
SECOND DOCUMENT
INCLUDES—READ NUMBER ON ONE DOCUMENT AND LOOK
TO SECOND DOCUMENT AND READ NUMBER
ENDS—WITH EYES ON SECOND DOCUMENT AT COMPLET-
ION OF READING SECOND NUMBER

DIGITS READ		DISTANCE EYE TRAVEL (IN INCHES)		
		10	15	20
		A	B	C
1	A	44	54	64
2	B	54	64	74
3	C	64	74	84
4	D	74	84	94
5	E	84	94	104
6	F	147	166	185
7	G	161	180	199
8	H	175	194	213
9	J	189	208	227
10	K	203	222	241
11	L	217	236	255
12	M	231	250	269

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DL	U	MAL	BCRP	TRDSSXX	TABLE	SHEET(S),SCAN FOR FAMILIAR REFERENCE POINT(S), LETTER SIZE SHEETS

STARTS—WITH THE EYES MOVING TOWARD THE FIRST
SHEET TO BE SCANNED
INCLUDES—SCANNING SHEET(S),TURNING SHEET(S),
AND IDENTIFYING THE POINTS OF REFERENCE
ENDS—WHEN THE LAST SHEET IS SCANNED AND TURNED
OVER
CONDITIONS—DOES NOT INCLUDE READING THE
IDENTIFIED INFORMATION,MAKING ANY TYPE OF EDIT
OR CHECK MARK,WRITING,ETC.

NUMBER OF SHEETS SCANNED		REFERENCE POINTS IDENTIFIED				
		0	1	2	3	4
		A	B	C	D	E
1	A	17	31	45	60	74
2	B	51	66	80	94	109
3	C	86	100	115	129	143
4	D	121	135	149	164	178
5	E	155	170	184	198	212
6	F	190	204	218	233	247
7	G	224	239	253	267	282
8	H	259	273	288	302	316
9	J	294	308	322	337	351
10	K	328	343	357	371	385

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION

MAA	U	MAA	OSTCAXX	MSTCSXX	VARIABLE	COAT,SPRAY(AEROSOL)
						STARTS—WITH REACH TO AEROSOL SPRAY CAN
						INCLUDES—ALL THE MOTIONS NECESSARY TO REMOVE
						   CAP OR COVER FROM CAN,SHAKE CAN,POSITION FOR
						   USE,ACTUATE BUTTON TO COAT A SPOT OR AREA,
						   INVERT CAN,ACTUATE BUTTON TO BLOW VEHICLE FROM
						   TUBE,REPLACE CAP OR COVER AND ASIDE CAN.ALSO
						   INCLUDES MOTION TO COAT AN ADDITIONAL SPOT OR
						   AREA AS NECESSARY
						ENDS—WITH CAN ASIDE
						CONDITIONS—APPLIES TO UNOBSTRUCTED SURFACE
						   TREATMENT WITH PRIMER,RUST INHIBITOR,DRI—LUB,
						   LACQUER OR SIMILAR SUBSTANCE—DOES NOT INCLUDE
						   TIME FOR AGITATION OF NEW ISSUE OR EQUIVALENT
						   CONDITION AEROSOL CAN

					517	CASE 01 SPOT(BOLT HEAD,RIVET,NUT,AREA TO TWO SQUARE INCHES)
					551	02 STRIP,LINEAR,1X12 INCHES
					1260	03 AREA,SURFACE—ONE SQUARE FOOT
					65	04 ADDITIONAL SPOT
					109	05 ADDITIONAL STRIP(1X12 INCHES)
					776	06 ADDITIONAL SURFACE AREA(PER SQUARE FOOT)

FFD	U	MAA	BTFFMXX	BTFFMXX	VARIABLE	FASTENER(THREADED),TURN WITH FINGER MOVE ONLY
						STARTS—WITH HAND ON FASTENER
						INCLUDES—ALL THE TIME NECESSARY TO MOVE
						   FINGERS TO TURN A FASTENER
						ENDS—WITH HAND ON FASTENER
						CONDITION—APPLIES TO BOLT,SCREW,NUT,OR HAND
						   KNOB TO 4 INCHES IN DIAMETER

					3	CASE 01 MOVE UP TO 1.5 INCHES
					4	02 MOVE 1.5 INCHES TO 2.5 INCHES
					5	03 MOVE 2.5 INCHES TO 3.5 INCHES
FFD	U	MAA	BTFFSXX	BTFFSXX	VARIABLE	FASTENER(THREADED),TURN BY SHIFT GRASP AND MOVE WITH FINGERS STARTS—WITH HAND ON FASTENER INCLUDES—ALL THE TIME NECESSARY TO TURN THE FASTENER BY SHIFTING GRASP AND MOVING FINGERS ENDS—WITH HAND ON FASTENER
					10	CASE 01 MOVE UP TO 1.5 INCHES
					12	02 MOVE 1.5 TO 2.5 INCHES
					14	03 MOVE 2.5 TO 3.5 INCHES

FFD	U	MAL	BTFFTXX	BTFFTXX	VARIABLE	FASTENER(THREADED),TURN WITH FINGER,
						PER THREAD
						STARTS—WITH HAND ON FASTENER
						INCLUDES—ALL THE MOTIONS NECESSARY TO TURN A
						   FASTENER ONE THREAD
						ENDS—WITH HAND ON FASTENER
						CONDITIONS—TO DETERMINE CORRECT CASE USE THE
						   DIAMETER OF THE OBJECT AT THE POINT OF CONTACT
						   WITH HAND

					4	CASE 01 UP TO 0.25 INCHES O.D.
					11	02 0.25 INCHES TO 0.75 INCHES O.D.
					23	03 0.75 INCHES TO 1.75 INCHES O.D.
					37	04 1.75 INCHES TO 3.25 INCHES O.D.

FFH	U	MAA	BTFPFXX	BTFNP01	32	NUT,POSITION ON STUD
						STARTS—WITH RELEASE OF WASHER PREVIOUSLY
						   POSITIONED ON STUD
						INCLUDES—ALL THE MOTIONS NECESSARY TO UNPALM
						   NUT AND POSITION ON A STUD
						ENDS—WITH NUT ON STUD READY TO START

AF	U	MAD	MOE3E	BTFNP02	57	NUT(SMALL),POSITION AND ENGAGE ON BOLT STARTS—WITH MOVE NUT TO BOLT INCLUDES—ALL THE MOTIONS NECESSARY TO ENGAGE A NUT ON A BOLT PRIOR TO RUN DOWN ENDS—WITH HAND ON NUT

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	ONMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	BTFSBXX	BTFSBXX	VARIABLE	FASTENER(THREADED),START(BLIND) STARTS—WITH OBJECT UNDER CONTROL INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE AND BLIND POSITION AN OBJECT AND ENGAGE THREAD ENDS—WITH THE ENGAGEMENT OF THE THREAD
					60	CASE 01 MOVE TO POSITION—FRACTIONAL
					63	02 MOVE TO POSITION 1-3 INCHES
					68	06 MOVE TO POSITION 3-9 INCHES
					73	12 MOVE TO POSITION 9-15 INCHES
					78	18 MOVE TO POSITION 15-21 INCHES
					83	24 MOVE TO POSITION 21-27 INCHES
FFD	U	MAA	BTFSS01	BTFSS01	10	FASTENER(THREADED),SPIN STARTS—WITH HAND NEAR FASTENER INCLUDES—ALL THE MOTIONS NECESSARY TO REACH BACK AND MOVE FINGERS FORWARD CONTACTING FASTENER TO TURN IT ENDS—WITH HAND NEAR FASTENER CONDITIONS—FASTENER MUST TURN FREELY
FFD	U	MAA	BTFSVXX	BTFSVXX	VARIABLE	FASTENER(THREADED),START(VISIBLE) STARTS—WITH OBJECT UNDER CONTROL INCLUDES—ALL THE MOTIONS NECESSARY TO MOVE AND POSITION OBJECT AND ENGAGE THREAD ENDS—WITH THE ENGAGEMENT OF THE THREAD
					26	CASE 01 MOVE TO POSITION—FRACTIONAL
					29	02 MOVE TO POSITION 1-3 INCHES
					34	06 MOVE TO POSITION 3-9 INCHES
					39	12 MOVE TO POSITION 9-15 INCHES
					44	18 MOVE TO POSITION 15-21 INCHES
					49	24 MOVE TO POSITION 21-27 INCHES
FFD	U	MAA	BTFTN01	BTFTN01	18	FASTENER(THREADED),TIGHTEN OR LOOSEN STARTS—WITH HAND ON FASTENER INCLUDES—ALL THE MOTIONS NECESSARY TO APPLY PRESSURE TO TIGHTEN OR LOOSEN A THREADED FASTENER ENDS—WITH HAND ON FASTENER
FFD	U	MAA	TTFIHAK	BTFWA01	24	WASHER,ALIGN TO NUT BEFORE STARTING TO POSITION ON BOLT/SCREW STARTS—WITH WASHER AND NUT IN CLOSE PROXIMITY IN SEPARATE HANDS INCLUDES—ALL THE MOTIONS NECESSARY TO BRING WASHER AND NUT TOGETHER IN PROPER ALIGNMENT ENDS—NUT AND WASHER TOGETHER CONDITIONS—PLAIN,LOCK OR TAB WASHER TO 1 1/4 INCHES I.D.
FFD	U	MAA	TTFIHXX	BTFWPXX	VARIABLE	WASHER,PLACE ON SCREW OR BOLT STARTS—WITH WASHER AND OTHER OBJECT IN SEPARATE HANDS IN CLOSE PROXIMITY INCLUDES—ALL THE MOTIONS NECESSARY TO PLACE ON AND SEAT A WASHER ENDS—WITH WASHER SEATED CONDITIONS—PLAIN,LOCK OR TAB WASHERS TO 1 1/4 INCHES I.D.
					26	CASE 01 PLACE ON SCREW OR BOLT TO ONE INCH LONG
					35	02 PLACE ON SCREW OR BOLT 1-3 INCH LONG
FFD	U	MAA	BTFWRXX	BTFWRXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST,PER REVOLU-TION STARTS—WITH HAND ON FASTENER INCLUDES—ALL THE MOTIONS NECESSARY TO TURN A FASTENER ONE REVOLUTION ENDS—WITH HAND ON FASTENER
					59	CASE 01 TURN 90 DEGREES
					53	02 TURN 120 DEGREES
					46	03 TURN 180 DEGREES

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OWWSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

FFD	U	MAA	BTFWSXX	BTFWSXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST,SHIFT GRASP AND TURN
						  STARTS-WITH HAND ON FASTENER
						  INCLUDES-ALL THE MOTIONS NECESSARY TO TURN A
						    FASTENER A PARTIAL REVOLUTION
						  ENDS-WITH HAND ON FASTENER
						  CONDITIONS-SHIFT GRASP AND TURN SEQUENCE

					15	CASE 01 TURN 90 DEGREES
					18	02 TURN 120 DEGREES
					23	03 TURN 180 DEGREES

FFD	U	MAA	BTFWTXX	BTFWTXX	VARIABLE	FASTENER(THREADED),TURN WITH WRIST
						  STARTS-WITH HAND ON FASTENER
						  INCLUDES-ALL THE MOTIONS NECESSARY TO TURN A
						    FASTENER A PARTIAL REVOLUTION
						  ENDS-WITH HAND ON FASTENER
						  CONDITIONS-TURN ONLY

					5	CASE 01 TURN 90 DEGREES
					7	02 TURN 120 DEGREES
					9	03 TURN 180 DEGREES

FFE	U	MAA	IOTAPA3	MTFCIXX	VARIABLE	CAP(OR PLUG),INSTALL,PLASTIC THREADED
						  STARTS-WITH GET PLUG
						  INCLUDES-ALL MOTIONS NECESSARY TO POSITION
						    CAP OR PLUG,TURN DOWN FOUR THREADS,AND TIGHTEN
						  ENDS-WITH RELEASE PLUG OR ASIDE TOOL

					294	CASE 01 CAP OR PLUG INSTALLED AND TIGHTENED BY HAND

					394	02 CAP OR PLUG INSTALLED BY HAND AND
						              TIGHTENED WITH TOOL(INCLUDES GET,USE,
						              AND ASIDE TOOL)

FFE	U	MAA	IOTAPD3	MTFCRXX	VARIABLE	CAP(OR PLUG),REMOVE,PLASTIC THREADED
						  STARTS-WITH REACH TO PLUG OR TOOL
						  INCLUDES-ALL MOTIONS NECESSARY TO LOOSEN CAP
						    OR PLUG,TURN OUT FOUR THREADS,AND ASIDE PLUG
						  ENDS-WITH RELEASE PLUG OR ASIDE TOOL

					260	CASE 01 REMOVE CAP OR PLUG BY HAND

					365	02 LOOSEN CAP OR PLUG WITH TOOL AND
						              REMOVE BY HAND(INCLUDES GET,USE,AND
						              ASIDE TOOL)

FFD	U	MAA	MTFETXX	MTFFGXX	VARIABLE	FASTENER(THREADED),GET(EASY)AND START(VISIBLE)
						  STARTS-WITH MOVEMENT OF HAND TOWARD FASTENER
						  INCLUDES-ALL THE MOTIONS NECESSARY TO REACH TO
						    FASTENER,GAIN CONTROL,MOVE TO BOLT,STUD,OR NUT
						    AND START ON THREAD
						  ENDS-WITH RELEASE OF FASTENER
						  CONDITIONS-UP TO AND INCLUDING 2.5 LBS.E.N.W.

					32	CASE 01 MOVE ONE INCH
					37	02 MOVE 1-3 INCHES
					47	06 MOVE 3-9 INCHES
					56	12 MOVE 9-15 INCHES
					65	18 MOVE 15-21 INCHES
					75	24 MOVE 21-27 INCHES

FFD	U	MAA	TTFIHXX	MTFFIXX	VARIABLE	FASTENER(THREADED),INSTALL
						  STARTS-WITH GET FASTENER
						  INCLUDES-ALL THE MOTIONS NECESSARY TO GET
						    FASTENER,RUN DOWN BY HAND TO FIVE THREADS
						  ENDS-WITH RELEASE OF FASTENER
						  CONDITIONS-FASTENER NOT TIGHTENED

					89	CASE 01 EASY GET-VISIBLE START
					123	02 EASY GET-BLIND START
					97	03 JUMBLED GET-VISIBLE START
					131	04 JUMBLED GET-BLIND START
					134	05 SIMO JUMBLED GET-VISIBLE START
					205	06 SIMO JUMBLED GET-BLIND START

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	MTFJTXX	MTFFPXX	VARIABLE	FASTENER(THREADED),GET(JUMBLED)AND START (VISIBLE)
						STARTS-WITH MOVEMENT OF HAND TOWARD FASTENER
						INCLUDES-ALL THE MOTIONS NECESSARY TO REACH TO FASTENER,GAIN CONTROL,MOVE TO BOLT,STUD,OR NUT,AND START ON THREAD
						ENDS-WITH RELEASE OF FASTENER
						CONDITIONS-UP TO AND INCLUDING 2.5 LBS. E.N.W.
					39	CASE 01 MOVE ONE INCH
					46	02 MOVE 1-3 INCHES
					55	06 MOVE 3-9 INCHES
					64	12 MOVE 9-15 INCHES
					74	18 MOVE 15-21 INCHES
					83	24 MOVE 21-27 INCHES
FFD	U	MAA	MTFSTXX	MTFFSXX	VARIABLE	FASTENER(THREADED),GET(JUMBLED SIMO) AND START (VISIBLE)
						STARTS-WITH MOVEMENT OF HAND TOWARD FASTENER
						INCLUDES-ALL MOTIONS NECESSARY TO REACH TO FASTENER,GAIN CONTROL,MOVE TO BOLT,NUT,OR STUD AND START ON THREAD
						ENDS WITH RELEASE OF FASTENER
						CONDITIONS-UP TO AND INCLUDING 2.5 LBS.E.N.W.-PLACE VISIBLE
					76	CASE 01 MOVE ONE INCH
					83	02 MOVE 1-3 INCHES
					92	06 MOVE 3-9 INCHES
					101	12 MOVE 9-15 INCHES
					111	18 MOVE 15-21 INCHES
					120	24 MOVE 21-27 INCHES
FFD	U	MAA	MTFPFXX	MTFNPXX	VARIABLE	NUT AND WASHER,POSITION ON STUD
						STARTS-WITH MOVE OF NUT AND WASHER TO STUD
						INCLUDES-ALL THE MOTIONS NECESSARY TO PLACE A WASHER AND NUT ON A STUD
						ENDS-WITH NUT ON STUD
						CONDITONS-DOES NOT INCLUDE ENGAGING OR THREADING NUT ON STUD
					27	CASE 02 MOVE TO STUD 1-3 INCHES
					33	06 MOVE TO STUD 3-9 INCHES
					37	12 MOVE TO STUD 9-15 INCHES
					43	18 MOVE TO STUD 15-21 INCHES
FFD	U	MAA	GEAFN5U	MTFPF01	80	FASTENER(THREADED),POSITION IN HOLE
						STARTS-WITH REACH TO GET BOLT
						INCLUDES-ALL THE MOTIONS NECESSARY TO GET BOLT AND POSITION IN HOLE,MOVE BOLT INTO HOLE, RELEASE BOLT
						ENDS-WITH RELEASE BOLT
						CONDITIONS-MOVE UP TO THREE INCHES INTO HOLE
FFH	U	MAA	KTFWRA1	MTFWPQ1	73	WASHER,PLACE ON BOLT OR SCREW
						STARTS-WITH BOLT IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO GET WASHER, POSITION TO BOLT,AND SLIDE ON BOLT
						ENDS-WITH WASHER SEATED ON BOLT,BOLT IN HAND
						CONDITIONS-BOLT ONE-THREE INCHES LONG,WASHER TO 1 1/4 INCHES INSIDE DIAMETER,APPLICABLE TO PLAIN,LOCK,OR TAB WASHERS
FFH	U	MAA	KTFWRA2	MTFWP02	62	WASHER,PLACE IN ALIGNMENT WITH NUT PRIOR TO STARTING NUT ON THREADS
						STARTS-WITH NUT IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO GET WASHER AND ALIGN TO NUT
						ENDS-WITH NUT AND WASHER ALIGNED
						CONDITIONS-PLAIN,LOCK,OR TAB WASHER TO 1 1/4 INCHES INSIDE DIAMETER

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	TTFIHXX	TTFFIXX	TABLE	FASTENER(THREADED),INSTALL WITH HAND

STARTS-WITH GET FASTENER
INCLUDES-ALL THE MOTIONS NECESSARY TO GET
FASTENER,START,RUN DOWN BY HAND THE REQUIRED
NUMBER OF THREADS
ENDS-FASTENER RUN DOWN
CONDITIONS-FASTENER NOT TIGHTENED

		5-10 THREADS		
TYPE OF START		EASY GET A	JUMBLED GET B	JUMBLED SIMO GET C
VISIBLE	A	133	141	178
BLIND	B	178	186	193

		10-15 THREADS		
TYPE OF START		EASY GET A	JUMBLED GET B	JUMBLED SIMO GET C
VISIBLE	C	199	207	244
BLIND	D	233	241	248

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	TTFRHXX	TTFFRXX	TABLE	FASTENER(THREADED),REMOVE WITH HAND

STARTS-WITH REACH TO LOCATE FASTENER
INCLUDES-ALL THE MOTIONS NECESSARY TO LOCATE
FASTENER AND RUN OFF BY HAND
ENDS-WITH FASTENER IN HAND
CONDITIONS-FASTENER ALREADY LOOSE

NUMBER OF THREADS TO RUN OFF		UNOBSTRUCTED		OBSTRUCTED	
		BLIND A	CLEAR B	BLIND C	CLEAR D
TO FIVE	A	58	50	97	89
5-10	B	102	94	193	185
10-15	C	168	160	337	329

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BTLBPXX	BTLBPXX	VARIABLE	BAR(PRY),USE

STARTS-WITH BAR IN POSITION AND READY TO USE
INCLUDES-ALL MOTIONS NECESSARY TO MOVE OBJECT
BY PRYING
ENDS-WITH BAR IN PLACE AFTER USE
CONDITIONS-LIMITED TO 2.5 POUNDS RESISTANCE
WITH ONE HAND USE AND 5.0 POUNDS RESISTANCE
WITH TWO HAND USE.FOR MOVES WITH WEIGHT
SUPPLEMENT WITH TEL-WF-XX

TMU VALUE	
20	CASE 01 OBJECT MOVED LESS THAN ONE INCH
25	02 OBJECT MOVED 1-3 INCHES
34	06 OBJECT MOVED 3-9 INCHES
43	12 OBJECT MOVED 9-15 INCHES

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	MAA	BTLCCXX	BTLCUXX	VARIABLE	CHISEL(COLD),USE,FIRST OR ADDITIONAL BLOWS

STARTS-WITH CHISEL IN ONE HAND AND HAMMER IN
THE OTHER
INCLUDES-ALL MOTIONS NECESSARY TO POSITION
CHISEL TO WORK AND STRIKE ONE BLOW WITH A
HAMMER
ENDS-WITH CHISEL AND HAMMER IN HAND

TMU VALUE	
72	CASE 01 FIRST OR SINGLE BLOW
17	02 EACH ADDITIONAL BLOW

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	MAA	BTLFS01	BTLFU01	37	FILE(OR HACKSAW),USE PER STROKE

STARTS-WITH TOOL IN POSITION FOR FIRST STROKE
INCLUDES-APPLY PRESSURE,FORWARD STROKE,AND
RETURN STROKE
ENDS-WITH COMPLETION OF RETURN STROKE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BTLHLXX	BTLHLXX	VARIABLE	HAMMER(LIGHT),STRIKE ONE BLOW
						STARTS-WITH HAMMER IN HAND READY TO STRIKE
						BLOW
						INCLUDES-ALL MOTIONS NECESSARY TO MAKE ONE
						DOWN STROKE AND ONE UP STROKE WITH A HAMMER
						ENDS-WITH HAMMER IN POSITION FOR NEXT BLOW
						CONDITION-FOR USE OF HAMMER WITH CARE,ADD
						TPL-OP-8C FOR EACH BLOW.APPLICABLE TO USE OF
						HAMMER WEIGHING TO 2.5 POUNDS
					8	CASE 02 HAMMER BLOW,1-3 INCH STROKE
					17	06 HAMMER BLOW,3-9 INCH STROKE
					26	12 HAMMER BLOW,9-15 INCH STROKE
					35	18 HAMMER BLOW,15-21 INCH STROKE
					43	24 HAMMER BLOW,21-27 INCH STROKE
FFH	U	MAA	BTLHMXX	BTLHMXX	VARIABLE	HAMMER(MEDIUM),STRIKE ONE BLOW
						STARTS-WITH HAMMER IN HAND READY TO STRIKE
						BLOW
						INCLUDES-ALL MOTIONS NECESSARY TO MAKE ONE
						DOWN STROKE AND ONE UP STROKE WITH A HAMMER
						ENDS-WITH HAMMER IN POSITION FOR NEXT BLOW
						CONDITION-FOR USE OF HAMMER WITH CARE,ADD
						TPL-OP-8C FOR EACH BLOW.APPLICABLE TO USE OF
						HAMMER WEIGHING 2.5-7.5 POUNDS
					9	CASE 02 HAMMER BLOW,1-3 INCH STROKE
					18	06 HAMMER BLOW,3-9 INCH STROKE
					28	12 HAMMER BLOW,9-15 INCH STROKE
					37	18 HAMMER BLOW,15-21 INCH STROKE
					46	24 HAMMER BLOW,21-27 INCH STROKE
FF	U	MAA	BTLHAXX	BTLHMXX	VARIABLE	HATCHET,USE,STRIKE FIRST OR ADDITIONAL BLOW
						STARTS-WITH HATCHET IN HAND
						INCLUDES-ALL MOTIONS NECESSARY TO POSITION
						HATCHET TO OBJECT AND STRIKE ONE BLOW(CASE 01)
						OR STRIKE ADDITIONAL BLOW(CASE 02)
						ENDS-WITH HATCHET IN HAND READY FOR NEXT BLOW
						OR TO LAY ASIDE
					42	CASE 01 FIRST OR SINGLE BLOW
					32	02 EACH ADDITIONAL BLOW
FF	U	MAA	BTLKFXX	BTLKUXX	VARIABLE	KNIFE,USE,TO CUT OR SCRAPE,PER STROKE
						STARTS-WITH KNIFE IN POSITION FOR FIRST STROKE
						INCLUDES-APPLY PRESSURE,ONE FORWARD STROKE,AND
						ONE RETURN STROKE
						ENDS-WITH KNIFE IN HAND AT END OF THE RETURN
						STROKE
					16	CASE 01 PER STROKE UP TO ONE INCH
					20	02 PER STROKE,1-3 INCHES
					28	06 PER STROKE,3-9 INCHES
DND	U	MAD	LA1H5	BTLMCXX	VARIABLE	MATERIAL,CUT ALONG STRAIGHTEDGE WITH KNIFE
						STARTS-WITH KNIFE IN HAND,OTHER HAND HOLDING
						STRAIGHTEDGE
						INCLUDES-ALL MOTIONS NECESSARY TO MOVE KNIFE
						TO START POINT OF CUT,DRAW KNIFE ALONG
						STRAIGHTEDGE,LIFT KNIFE,MOVE BACK TO START
						POINT,AND MAKE SECOND CUT
						ENDS-WITH KNIFE IN HAND
						CONDITIONS-TIME TO GET AND PLACE STRAIGHTEDGE
						AND TO GET AND ASIDE KNIFE NOT INCLUDED
					150	CASE 01 FIRST OR SINGLE SIX-INCH CUT
					15	02 EACH ADDITIONAL SIX INCHES CUT WITHOUT
						LIFTING KNIFE
FF	U	MAA	BTLPV01	BTLPA01	72	PLIERS(VISE GRIP)ADJUST
						STARTS-WITH VISE GRIP PLIERS AT WORK PIECE
						INCLUDES-ALL MOTIONS NECESSARY TO CLOSE JAWS
						TO CHECK OPENING,OPEN JAWS,AND ADJUST SCREW
						(TWO CYCLES OF THE ABOVE MOTIONS ARE INCLUDED)
						ENDS-WITH CLOSING JAWS FOR FINAL CHECK OF
						OPENING SIZE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAN	FPLADXX	BTLPA02	75	PLIERS(SLIP JOINT),ADJUST STARTS=WITH PLIERS IN HAND INCLUDES=ALL MOTIONS NECESSARY TO ADJUST PLIERS TO DESIRED OPENING ENDS=WITH PLIERS IN HAND
FFH	U	MAA	BTLPCXX	BTLPCXX	VARIABLE	PLIERS(CONVENTIONAL),USE TO CUT,CRIMP,OR GRIP AN OBJECT STARTS=WITH PLIERS IN HAND POSITIONED ON PART INCLUDES=ALL MOTIONS NECESSARY TO CLOSE PLIERS,APPLY PRESSURE TO PLIER HANDLES,AND OPEN PLIERS ENDS=WITH PLIERS OPEN AND IN HAND CONDITION=NO TIME IS ALLOWED FOR DOING OTHER WORK WHILE OBJECT IS HELD
					15	CASE 01 USE PLIERS,LIGHT RESISTANCE,TO 30 POUNDS
					20	02 USE PLIERS,HEAVY RESISTANCE,30-45 POUNDS
FF	U	MAA	BTLPV02	BTLPC03	65	PLIERS(VISE GRIP),CLOSE ON OBJECT AND OPEN TO REMOVE STARTS=WITH PLIERS POSITIONED OVER OBJECT TO BE HELD INCLUDES=ALL MOTIONS NECESSARY TO CLOSE AND LOCK PLIERS;AND TO UNLOCK AND OPEN PLIERS ENDS=WITH PLIERS OPEN AND IN HAND CONDITION=NO TIME ALLOWED FOR WORK DONE WHILE OBJECT IS BEING HELD
FF	U	MAA	BTLSA01	BTLSA01	132	SOCKET,ATTACH TO ADAPTER AND ATTACH ADAPTER TO HANDLE STARTS=WITH ADAPTER HELD IN RIGHT HAND AND SOCKET IN LEFT HAND INLCUDES=ALL MOTIONS NECESSARY TO ATTACH THE SOCKET TO THE ADAPTER AND TO ATTACH THE ADAPTER TO EXTENSION,HANDLE,ETC. ENDS=WITH TOOL IN HAND,READY FOR USE
FFH	U	MAA	BTLSCXX	BTLSCXX	VARIABLE	SCREWDRIVER,CONVENTIONAL,USE STARTS=WITH TOOL IN HAND,READY FOR USE INCLUDES=ALL MOTIONS NECESSARY TO USE SCREWDRIVER AS INDICATED ENDS=WITH SCREWDRIVER IN PLACE AFTER USE
					23	CASE 01 ENGAGE SCREWDRIVER TO PART AND DISENGAGE FROM PART
					8	02 CONVENTIONAL SCREWDRIVER,FINGER TURN, PER MOVE,TO 3/4 INCH DIAMETER HANDLE
					12	03 CONVENTIONAL SCREWDRIVER,FINGER TURN, PER MOVE,3/4-2 INCH DIAMETER HANDLE
					21	04 CONVENTIONAL SCREWDRIVER,FINGER TURN, PER THREAD,TO 3/4 INCH DIAMETER HANDLE
					31	05 CONVENTIONAL SCREWDRIVER,FINGER TURN, PER THREAD,3/4-2 INCH DIAMETER HANDLE
					18	06 CONVENTIONAL SCREWDRIVER,WRIST TURN, PER MOVE
					53	07 CONVENTIONAL SCREWDRIVER,WRIST TURN, PER THREAD
FF	U	MAA	BTLSA02	BTLSD01	62	SOCKET,DISENGAGE FROM ADAPTER AND REMOVE ADAPTER FROM HANDLE STARTS=WITH HANDLE,WITH SOCKET AND ADAPTER ATTACHED,HELD IN HAND INCLUDES=ALL MOTIONS NECESSARY TO REMOVE SOCKET FROM ADAPTER AND ADAPTER FROM HANDLE ENDS=WITH REMOVAL OF ADAPTER FROM HANDLE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BTLSRXX	BTLSRXX	VARIABLE	SCREWDRIVER,RATCHET,USE STARTS—WITH SCREWDRIVER IN HAND,READY FOR USE INCLUDES—ALL MOTIONS NECESSARY TO USE SCREWDRIVER AS INDICATED ENDS—WITH SCREWDRIVER IN PLACE AFTER USE
					9	CASE 01 MOVE TURN MOTION,PER MOVE
					23	02 MOVE TURN MOTIGN,PER THREAD
					14	03 WRIST TURN MOTION,PER TURN
					41	04 WRIST TURN MOTION,PER THREAD
FF	U	MAA	BTLSSXX	BTLSSXX	VARIABLE	SCISSORS(OR SHEARS),CUT STARTS—WITH SCISSORS OR SHEARS POSITIONED FOR CUTTING INCLUDES—ALL MOTIONS NECESSARY TO MAKE ONE CUT ALONG A LINE USING SCISSORS OR SHEARS ENDS—WITH COMPLETION OF CUT
					11	CASE 01 SMALL SCISSORS OR SHEARS,TO TWO INCH CUT WITH ONE HAND,UP TO 2.5 POUNDS RESISTANCE
					13	02 LARGE SCISSORS OR SHEARS, 2—4 INCH CUT WITH TWO HANDS,UP TO FIVE POUNDS RESISTANCE
NF	U	MAF	953	BTLSU01	31	SCREWDRIVER,USE FOR FINAL TIGHTEN OR INITIAL LOOSEN STARTS—WITH SCREWDRIVER IN HAND AND POSITIONED IN SCREW SLOT INCLUDES—ALL MOTIONS NECESSARY TO APPLY PRESSURE AND TURN SCREW 90 DEGREES TO LOOSEN OR TO APPLY PRESSURE AND TURN SCREW 90 DEGREES TO TIGHTEN ENDS—WITH SCREWDRIVER IN SCREW SLOT
FFH	U	MAA	BTLTDXX	BTLTDXX	VARIABLE	TAP(OR DIE),CUT ONE THREAD STARTS—WITH TOOL POSITIONED INCLUDES—ALL MOTIONS NECESSARY TO CUT ONE THREAD WITH TAP OR DIE OR TO REMOVE TAP OR DIE ONE THREAD ENDS—WITH TOOL IN HAND CONDITIONS—MAXIMUM RESISTANCE FOR WRIST TURN MOTIONS—2.0 POUNDS AND FOR MOVE TURN MOTIONS—2.5 POUNDS.
					67	CASE 01 WRIST TURN MOTIONS,CUT ONE THREAD
					46	02 WRIST TURN MOTION,REMOVE ONE THREAD
					102	03 MOVE TURN MOTIONS,CUT ONE THREAD,UP TO TO 6 INCH HANDLE
					63	04 MOVE TURN MOTION,REMOVE ONE THREAD,UP TO 6 INCH HANDLE
					140	05 MOVE TURN MOTIONS,CUT ONE THREAD,6—10 INCH HANDLE
					85	06 MOVE TURN MOTION,REMOVE ONE THREAD, 6—10 INCH HANDLE
FFO	U	MAA	TTFAAXX	BTLTUXX	VARIABLE	TOOL,USE(ADDITIVE FOR INSTALLATION OR REMOVAL OF SELF LOCKING FASTENERS) STARTS—WITH APPLY PRESSURE TO TOOL INCLUDES—ALL THE MOTIONS NECESSARY TO MAKE THREE 120 DEGREE TURNS WITH THE TOOL ENDS—WITH FASTENER TURNED ONE THREAD CONDITIONS—ELEMENT APPLICABLE TO INSTALL OR REMOVE THREADED FASTENER—ELEMENT IS USED AS AN ADDITIVE WHEN A SELF LOCKING DEVICE IS USED WITH A THREADED FASTENER AND THE TIGHTENING OR LOOSENING IS DONE WITH THE TOOLS SHOWN FOR CASES BELOW
					42	CASE 01 2.5—10 LBS RESISTANCE—USING NUTDRIVER, SCREWDRIVER OR T HANDLE
					57	02 10—20 LBS RESISTANCE—USING WRENCH WITH 12—16 INCH HANDLE
					69	03 20—30 LBS RESISTANCE—USING WRENCH WITH 16—24 INCH HANDLE

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	2062	BTLWA01	77	WRENCH,ADJUST,MONKEY OR CRESCENT STARTS—WITH WRENCH IN HAND INCLUDES—ALL MOTIONS NECESSARY TO REGRASP WRENCH HANDLE,GET AND MOVE ADJUSTING SCREW FOUR TIMES,TRY WRENCH TO WORK,AND MAKE FINAL ADJUSTMENT ENDS—WITH WRENCH IN HAND ON WORK
FFH	U	MAA	BTLWHXX	BTLWHXX	VARIABLE	HANDLE("T"),ENGAGE AND DISENGAGE OR USE TO TURN OBJECT STARTS—WITH TOOL IN HAND,READY FOR USE AS INDICATED INCLUDES—ALL MOTIONS NECESSARY TO ENGAGE AND DISENGAGE "T" HANDLE(CASE 01),OR TO USE THE "T" HANDLE TO TURN A PART(CASES 02—04) ENDS—WITH HAND ON HANDLE CONDITION—INCLUDES MOVES WITH RESISTANCE TO 2.5 POUNDS EFFECTIVE NET WEIGHT(ENW),AND WRIST TURNS WITH RESISTANCE TO 2.0 POUNDS ENW
					26	CASE 01 ENGAGE AND DISENGAGE "T" HANDLE
					15	11 SPIN BY HAND,PER HAND SEQUENCE
					46	12 WRIST TURN MOTIONS,PER THREAD
					68	13 MOVE TURN MOTIONS,PER THREAD,"T" BAR WITH DIAMETER TO 16 INCHES
FFH	U	MAA	BTLWLXX	BTLWLXX	VARIABLE	BOLT(OR NUT),LOOSEN OR TIGHTEN WITH WRENCH STARTS—WITH WRENCH ON PART TO BE LOOSENED OR TIGHTENED INCLUDES—ALL MOTIONS NECESSARY TO USE A WRENCH TO LOOSEN OR TIGHTEN A PART ENDS—WITH WRENCH ON PART CONDITION—APPLIES TO OVERCOMING INITIAL RESISTANCE ONLY WHEN LOOSENING OR THE FINAL APPLICATION OF PRESSURE WHEN TIGHTENING
					16	CASE 51 NORMAL RESISTANCE
					35	52 HEAVY RESISTANCE
AF	U	MAO	MOL1G	BTLWP01	39	WRENCH(SPANNER),POSITION TO NUT AND REMOVE AFTER USE STARTS—WITH WRENCH IN HAND WITHIN TWO INCHES OF NUT INCLUDES—ALL THE MOTIONS NECESSARY TO POSITION A SPANNER WRENCH TO A NUT AND TO REMOVE THE WRENCH FROM THE NUT AFTER USE ENDS—WITH WRENCH IN HAND TWO INCHES FROM NUT
FFH	U	MAA	BTLWR01	BTLWR01	26	RATCHET(AND SOCKET),ENGAGE ON AND DISENGAGE FROM PART STARTS—WITH RATCHET IN HAND NEAR PART INCLUDES—ALL MOTIONS NECESSARY TO ENGAGE AND DISENGAGE SOCKET ENDS—WITH RATCHET IN HAND NEAR PART
FF	U	MAA	BTLWSXX	BTLWSXX	VARIABLE	HANDLE(SPEED),ATTACH TO AND REMOVE FROM PART OR TURN HANDLE ONE THREAD STARTS—WITH TOOL IN HAND READY FOR USE INCLUDES—ALL MOTIONS NECESSARY TO USE TOOL AS INDICATED ENDS—WITH TOOL REMOVED FROM PART(CASE 01)OR TOOL ON PART(CASE 02) CONDITIONS—CASE 01 INCLUDES START AND STOP TIME FROM CRANK FORMULA
					31	CASE 01 ENGAGE AND DISENGAGE SOCKET
					12	02 TURN HANDLE ONE THREAD WITH CRANKING MOTIONS(3-6 INCH CRANK DIAMETER)

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	MAA	BTLWTXX	BTLWTXX	VARIABLE	WRENCH,TORQUE,USE
						STARTS—WITH WRENCH IN HAND AND OTHER HAND ON ADJUSTING DEVICE(CASE 01-02)OR WRENCH ON PART (CASES 51-62)
						INCLUDES—ALL MOTIONS NECESSARY TO ADJUST OR USE TORQUE WRENCH AS INDICATED
						ENDS—WITH WRENCH IN HAND
					37	CASE 01 SET TORQUE ON DIAL TYPE WRENCH
					98	02 SET TORQUE ON SNAP TYPE WRENCH
					39	51 FINAL TIGHTEN MOTION WITH SNAP TYPE WRENCH WITH 7-12 INCH HANDLE;THREAD DIAMETER 5/16 INCH
					45	52 FINAL TIGHTEN MOTION WITH SNAP TYPE WRENCH WITH 12-16 INCH HANDLE;THREAD DIAMETER 5/16-1/2 INCH
					55	61 FINAL TIGHTEN MOTION WITH DIAL TYPE WRENCH WITH 7-12 INCH HANDLE;THREAD DIAMETER TO 5/16 INCH
					61	62 FINAL TIGHTEN MOTION WITH DIAL TYPE WRENCH WITH 12-16 INCH HANDLE;THREAD DIAMETER 5/16-1/2 INCH
FF	U	MAA	BTLSWXX	BTLWUXX	VARIABLE	WRENCH(STRAP),USE(ATTACH TO OBJECT)
						STARTS—WITH WRENCH IN HAND AT OBJECT
						INCLUDES—ALL MOTIONS NECESSARY TO PLACE A STRAP WRENCH ON OBJECT,BY PLACING LOOP OVER END OF OBJECT,TAKE UP SLACK IN STRAP AND LOCK STRAP
						ENDS—WITH WRENCH IN PLACE,READY TO TURN OBJECT
						CONDITION—APPLICABLE TO STRAP WRENCH WHERE WRENCH CAN BE PLACED OVER END OF OBJECT,NO THREADING OF STRAP IN WRENCH REQUIRED
					82	CASE 01 ATTACH WRENCH WITH 10 INCH HANDLE
					101	02 ATTACH WRENCH WITH 15 INCH HANDLE
					119	03 ATTACH WRENCH WITH 20 INCH HANDLE
FF	U	MAA	BTLSWXX	BTLWU04	32	WRENCH(STRAP),USE(FINAL TIGHTEN OR INITIAL LOOSEN)
						STARTS—WITH WRENCH PLACED,STRAP LOCKED
						INCLUDES—ALL MOTIONS NECESSARY TO LOOSEN OR TIGHTEN WITH STRAP WRENCH
						ENDS—WITH WRENCH IN HAND
						CONDITION—APPLICABLE TO BREAK LOOSE OR FINAL TIGHTEN ONLY
FF	U	MAA	BTLSW05	BTLWU05	75	WRENCH(STRAP),USE,(MAKE ONE QUARTER TURN)
						STARTS—WITH WRENCH PLACED,STRAP LOCKED
						INCLUDES—ALL MOTIONS NECESSARY TO MAKE ONE QUARTER TURN
						ENDS—WITH WRENCH READY FOR NEXT OPERATION
FF	U	MAA	BTLSW06	BTLWU06	39	WRENCH(STRAP),USE,(REMOVE FROM OBJECT)
						STARTS—WITH WRENCH IN POSITION,LOCKED ON OBJECT
						INCLUDES—ALL MOTIONS NECESSARY TO UNLOCK STRAP AND REMOVE WRENCH
						ENDS—WITH WRENCH OFF OBJECT READY TO BE PLACED ASIDE
NF	U	MAL	1062	MTLBU01	159	BAR(PINCH),USE
						STARTS—WITH PINCH BAR IN HAND
						INCLUDES—ALL THE TIME NECESSARY TO MOVE THE PINCH BAR AND POSITION AT PART,PUSH BAR UNDER PART,RAISE AND LOWER PART,PULL BAR FROM UNDER PART
						ENDS—WITH BAR FREE FROM PART
						CONDITION—APPLICABLE TO RESISTANCE TO 25 POUNDS ENW

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAN	FTDAXXX	MTLDAXX	VARIABLE	DIE(OR TAP),ASSEMBLE TO OR DISASSEMBLE FROM CHUCK OR HANDLE,HAND-HELD

STARTS-(CASE 01-03 AND 05)WITH REACH TO TAP OR
DIE,(CASE 04 AND 06)WITH HAND ON HANDLE READY
TO APPLY PRESSURE TO LOOSEN HANDLE
INCLUDES-ALL MOTIONS NECESSARY TO ASSEMBLE TAP
OR DIE TO CHUCK OR HANDLE OR TO DISASSEMBLE
TAP OR DIE FROM CHUCK OR HANDLE
ENDS-(CASES 01,02,04,AND 06)WITH RELEASE OF
TAP OR DIE,AND(CASE 03 AND 05)WITH TAP OR DIE
IN HAND

	TMU	Description
	98	CASE 01 ASSEMBLE TAP IN CHUCK
	77	02 DISASSEMBLE TAP FROM CHUCK
	139	03 ASSEMBLE TAP IN HANDLE
	110	04 DISASSEMBLE TAP FROM HANDLE
	150	05 ASSEMBLE DIE IN HANDLE
	122	06 DISASSEMBLE DIE FROM HANDLE

| FFD | U | MAA | TTFAAXX | MTLFLXX | VARIABLE | FASTENER(THREADED),LOOSEN WITH HAMMER OR MALLET |

STARTS-WITH A REACH TO GET HAMMER OR MALLET
INCLUDES-ALL THE MOTIONS NECESSARY TO LOOSEN
OR TIGHTEN A THREADED FASTENER WITH A HAMMER
OR MALLET
ENDS-WITH HAMMER OR MALLET ASIDE

	TMU	Description
	111	CASE 01 STRIKE SEVEN TO 12 INCH WRENCH HANDLE-TWO BLOWS
	139	02 STRIKE 12 TO 16 INCH WRENCH HANDLE-THREE BLOWS
	167	03 STRIKE 16 TO 24 INCH WRENCH HANDLE-FOUR BLOWS

| NO | U | MAO | LB1M2 | MTLHRXX | VARIABLE | HOLE,REAM BY HAND |

STARTS-WITH REACH TO REAMER
INCLUDES-ALL THE MOTIONS NECESSARY TO MOVE
REAMER TO AND POSITION IN HOLE,GRASP HANDLE
WITH BOTH HANDS AND RUN REAMER IN AND OUT
DISENGAGE AND ASIDE REAMER
ENDS-WITH ASIDE REAMER

	TMU	Description
	754	CASE 01 REAM FIRST OR SINGLE HOLE,FIRST INCH, HOLE UP TO 3/8 INCH DIAMETER
	716	02 EACH ADDITIONAL HOLE,REAM FIRST INCH, HOLE UP TO 3/8 INCH DIAMETER
	608	03 EACH ADDITIONAL INCH REAMED,FIRST OR ADDITIONAL HOLE,HOLE UP TO 3/8 INCH DIAMETER
	1079	04 REAM FIRST OR SINGLE HOLE,FIRST INCH,HOLE 3/8 TO 3/4 INCH DIAMETER
	1042	05 EACH ADDITIONAL HOLE,REAM FIRST INCH, HOLE 3/8 TO 3/4 INCH DIAMETER
	934	06 EACH ADDITIONAL INCH REAMED,FIRST OR ADDITIONAL HOLE,HOLE 3/8 TO 3/4 INCH DIAMETER
	1597	07 REAM FIRST OR SINGLE HOLE,FIRST INCH,HOLE GREATER THAN 3/4 INCH DIAMETER
	1559	08 EACH ADDITIONAL HOLE,REAM FIRST INCH, HOLE GREATER THAN 3/4 INCH DIAMETER
	1497	09 EACH ADDITIONAL INCH REAMED,FIRST OR ADDITIONAL HOLE,HOLE GREATER THAN 3/4 INCH DIAMETER

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
DL	U	MAL	BMHB	MTLMCXX	VARIABLE	MATERIAL(CLOTH),CUT WITH SCISSORS
						STARTS—WITH A MOVE OF THE SCISSORS TO THE MATERIAL
						INCLUDES—ALL THE TIME NECESSARY TO MAKE THE INITIAL CUT IN A PIECE OF MATERIAL AND CONTINUE THE CUT TO LENGTH SHOWN IN CASES
						ENDS—WITH THE SCISSORS IN POSITION TO CONTINUE CUTTING
						CONDITIONS—INITIAL CUT AND CUT UP TO 10 INCHES MADE WITH NORMAL OPENING AND CLOSING SCISSOR ACTIONS—CUTS OVER 10 INCHES ARE MADE WITH INITIAL CUT AND NORMAL SCISSOR ACTION FOR 10 INCHES AND THEN BY SLIDING SCISSORS WITHOUT OPENING OR CLOSING FOR THE REMAINDER OF THE CUT
					45	CASE 01 INITIAL TWO INCH CUT
					54	02 INITIAL FOUR INCH CUT
					63	03 INITIAL SIX INCH CUT
					73	04 INITIAL EIGHT INCH CUT
					81	05 INITIAL 10 INCH CUT
					34	06 ADD FOR EACH ADDITIONAL 10 INCH CUT
NF	U	MAF	2376	MTLPS01	97	PUNCH(CENTER),STRIKE
						STARTS—WITH MOVE PUNCH TO OBJECT
						INCLUDES—ALL THE MOTIONS NECESSARY TO POSITION AND STRIKE CENTER PUNCH WITH A HAMMER
						ENDS—WITH MOVE PUNCH AWAY
						CONDITIONS—STRIKE PUNCH TWO TIMES
FF	U	MAA	BTLCS01	MTLSC01	121	SOCKET,CHANGE,1/4,3/8,OR 1/2 INCH DRIVE WITH BALL AND SOCKET LOCK
						STARTS—WITH REACH TO SOCKET
						INCLUDES—ALL MOTIONS NECESSARY TO REMOVE FIRST SOCKET FROM HANDLE OR EXTENSION,PLACE ASIDE ON PEG OR IN SOCKET SET,GET SECOND SOCKET,AND ATTACH TO HANDLE
						ENDS—WITH TOOL READY FOR USE
DL	U	MAL	BECS	MTLSEXX	VARIABLE	STENCIL,CUT,ELECTRIC
						STARTS—WITH STENCIL BOARD IN HAND READY TO POSITION IN CUTTER
						INCLUDES—ALL THE TIME NECESSARY TO CUT A STENCIL ON AN ELECTRIC MACHINE
						ENDS—WHEN THE COMPLETED STENCIL IS REMOVED FROM THE MACHINE
					375	CASE 01 ONE LINE,SIX CHARACTERS
					462	02 TWO LINES,TOTAL SIX CHARACTERS
					636	03 THREE LINES,TOTAL EIGHT CHARACTERS
					723	04 FOUR LINES,TOTAL EIGHT CHARACTERS
					897	05 FIVE LINES,TOTAL TEN CHARACTERS
					994	06 SIX LINES,TOTAL TEN CHARACTERS
					44	07 EACH ADDITIONAL CHARACTER
					17	08 EACH BLANK SPACE REQUIRED TO SEPARATE WORDS OR CHARACTERS
DL	U	MAL	BECS	MTLSMXX	VARIABLE	STENCIL,CUT,MANUAL
						STARTS—WITH STENCIL BOARD IN HAND READY TO POSITION IN CUTTER
						INCLUDES—ALL THE TIME NECESSARY TO CUT A STENCIL ON A MANUAL MACHINE
						ENDS—WHEN THE COMPLETED STENCIL IS REMOVED FROM THE MACHINE
					469	CASE 01 ONE LINE,SIX CHARACTERS
					561	02 TWO LINES,TOTAL SIX CHARACTERS
					771	03 THREE LINES,TOTAL EIGHT CHARACTERS
					863	04 FOUR LINES,TOTAL EIGHT CHARACTERS
					1072	05 FIVE LINES,TOTAL TEN CHARACTERS
					1165	06 SIX LINES,TOTAL TEN CHARACTERS
					59	07 EACH ADDITIONAL CHARACTER
					26	08 EACH BLANK SPACE REQUIRED TO SEPARATE WORDS OR CHARACTERS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	937	MTLS001	99	SNIPS,OPEN ,POSITION TO WORK,CLOSE AND PLACE ASIDE STARTS—WITH REACH TO SNIPS INCLUDES—ALL MOTIONS NECESSARY TO PICK UP SNIPS,POSITION TO WORK,REMOVE FROM WORK,CLOSE SNIPS,AND PLACE ASIDE ENDS—WITH RELEASE OF SNIPS
DNO	U	MAO	LA1E/F	MTLSTXX	VARIABLE	SCREW,TURN IN AND TIGHTEN OR LOOSEN AND TURN OUT WITH SCREWDRIVER STARTS—WITH GET SCREWDRIVER INCLUDES—ALL MOTIONS NECESSARY TO ENGAGE SCREWDRIVER TO SLOT IN SCREW,TURN SCREW IN, TIGHTEN SCREW,AND DISENGAGE SCREWDRIVER ENDS—WITH ASIDE SCREWDRIVER CONDITIONS—APPLICABLE TO USE OF CONVENTIONAL SCREWDRIVER IN UNOBSTRUCTED LOCATION WITH NORMAL RESISTANCE.DOES NOT INCLUDE TIME TO GET SCREW AND START ON THREADS."ADDITIONAL" CASES DO NOT INCLUDE GET AND ASIDE SCREWDRIVER
					241	CASE 01 FIRST SCREW UP TO FIVE THREADS
					195	02 EACH ADDITIONAL SCREW UP TO FIVE THREADS AND UP TO 12 INCHES BETWEEN SCREWS
					396	03 FIRST SCREW,5-10 THREADS
					350	04 EACH ADDITIONAL SCREW,5-10 THREADS AND UP TO 12 INCHES BETWEEN SCREWS
NF	U	MAF	402X	MTLSU01	155	SHOVEL,USE,TO MOVE LOOSE MATERIAL SUCH AS SAND OR GRAVEL STARTS—WITH TURN TO MATERIAL TO BE SHOVELLED INCLUDES—ALL MOTIONS NECESSARY TO GET ONE SHOVELFUL OF MATERIAL AND TRANSFER IT TO AN OPEN CONTAINER SUCH AS A WHEELBARROW ENDS—WITH MATERIAL EMPTIED INTO CONTAINER
NF	U	MAF	2199	MTLSU02	221	SHOVEL,USE STARTS—WITH SHOVEL IN HAND INCLUDES—ALL MOTIONS NECESSARY TO PUSH SHOVEL INTO GROUND,STEP BACK,PUSH DOWN ON SHOVEL HANDLE TO LOOSEN DIRT,LIFT SHOVELFUL OF DIRT, MOVE AND DUMP DIRT,AND RETURN ENDS—WITH SHOVEL IN POSITION TO GET NEXT SHOVELFUL OF DIRT CONDITION—APPLICABLE TO SHOVELLING TOPSOIL OR SIMILAR
AE	U	MAW	FTCTC01	MTLTC01	690	TUBING,CUT WITH HAND HELD TUBE CUTTER,COPPER OR ALUMINUM TUBING 1/4-1/2 INCH DIAMETER STARTS—WITH CUTTER IN HAND OVER TUBING INCLUDES—ALL MOTIONS NECESSARY TO POSITION CUTTER,ADJUST CUTTER WHEEL,AND MAKE FIVE REVOLUTIONS WITH ADJUSTMENT OF THE CUTTER WHEEL AFTER EACH REVOLUTION ENDS—WITH CUTTER IN HAND OVER TUBING CONDITION—THIS ELEMENT APPLIES TO USE OF A HAND-HELD TUBING CUTTER APPROXIMATELY FOUR INCHES LONG
AF	U	MAF	MDE-2J1	MTLTG01	69	TOOL(TWO HANDLES),GET AND ASIDE STARTS—WITH REACH TO ONE HANDLE(RIGHT HAND) INCLUDES—ALL THE MOTIONS NECESSARY TO PICK UP TOOL BY ONE HANDLE,MOVE TO GRASP OTHER HANDLE WITH LEFT HAND,ADJUST GRIPS FOR USE,RELEASE WITH LEFT HAND,MOVE TOOL TO BENCH WITH RIGHT HAND,RELEASE ON BENCH ENDS—WITH RELEASE TOOL CONDITIONS—TOOL WITH TWO HANDLES,REQUIRES GRIP ON EACH HANDLE TO USE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	3882	MTLTU01	77	TOOL,OBTAIN FROM OPEN TOOLBOX AND ASIDE TO TOTE BOX OR BENCH TOP STARTS—WITH REACH TO TOOLS IN TOOLBOX INCLUDES—ALL THE MOTIONS NECESSARY TO GET TOOL FROM OPEN TOOLBOX(INCLUDING MOVE OTHER TOOLS ASIDE),TURN TO TOTE BOX,AND DEPOSIT TOOL IN TOTE BOX ENDS—WITH RELEASE OF TOOL IN TOTE BOX CONDITION—ALSO APPLICABLE TO RETURNING TOOL TO OPEN TOOLBOX FROM TOTE BOX WHEN SEARCH FOR TOOL IN TOTE BOX OCCURS
NF	U	MAF	928	MTLTR01	132	TOOL,REMOVE,FROM AND RETURN TO BELT KIT STARTS—WITH REACH TO TOOL IN KIT INCLUDES—ALL MOTIONS NECESSARY TO REMOVE TOOL FROM BELT KIT,PLACE TO USE,AND RETURN TOOL TO KIT ENDS—WITH RELEASE OF TOOL
FFE	U	MAA	GTLDSA2	MTLMA01	397	WRENCH(TORQUE),ADJUST INDICATOR STARTS—WITH WRENCH IN HAND INCLUDES—ALL MOTIONS NECESSARY TO GET INDICATOR AND ADJUST INDICATOR TO DESIRED SETTING WITH 90—DEGREE TURNS ENDS—WITH WRENCH IN HAND CONDITIONS—AN AVERAGE OF FIVE REVOLUTIONS REQUIRED TO OBTAIN DESIRED SETTING
AF	U	MAA	WICE001	MTLWC01	86	WIRE,CUT WITH DIAGONAL PLIERS STARTS—WITH SIMO REACH TO WIRE AND PLIERS INCLUDES—ALL MOTIONS NECESSARY TO PULL WIRE TIGHT,POSITION TO WIRE,CUT WIRE,AND ASIDE PLIERS ENDS—WITH RELEASE OF PLIERS
AF	U	MAO	WDE3P1	MTLWP01	31	WRENCH(HEX NUT DRIVER),POSITION TO NUT,REMOVE STARTS—WITH WRENCH IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO POSITION A WRENCH ON A NUT PRIOR TO RUN DOWN/TIGHTEN AND TO DISENGAGE ENDS—WITH DISENGAGE WRENCH FROM NUT

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	NAA	TTFITXX	TTLFIXX	TABLE	FASTENER(THREADED),INSTALL WITH HAND TOOL

STARTS—WITH REACH TO FASTENER
INCLUDES—ALL MOTIONS NECESSARY TO GET
    FASTENER,START FASTENER ON THREADS BY HAND,
    TURN FASTENER DOWN BY HAND,ENGAGE TOOL ON
    FASTENER,TURN FASTENER DOWN AND TIGHTEN WITH
    TOOL,AND DISENGAGE TOOL
ENDS—WITH TOOL IN HAND
CONDITIONS—NO TIME INCLUDED FOR GET/ASIDE
    TOOL.REACH TO FASTENER DISTANCE IS ONE—THREE
    INCHES.HEAVY RESISTANCE REQUIRES TOOL TO TURN
    FASTENER THE TOTAL THREAD LENGTH.NORMAL
    RESISTANCE REQUIRES TOOL FOR FINAL THREAD.

TO FIVE THREADS

TYPE OF TOOL		UNOBSTRUCTED/ UNRESTRICTED RESISTANCE		OBSTRUCTED/ RESTRICTED	
		HEAVY A	NORMAL B	HEAVY C	NORMAL D
YANKEE SCREWDRIVER	A		97		
NUTDRIVER OR SCREWDRIVER	B		155		
T—HANDLE WRENCH NO RESISTANCE TO SPIN	C		169		
NORMAL RESIST. AFTER START	D		288		
ALLEN WRENCH	E	493	310		1292
RATCHET WRENCH	F	371	192		
OPEN OR BOX END, BREAKOVER,OR ADJUSTABLE WRENCH THREAD DIAMETER					
TO 5/8 INCH	G	493	208	1292	479
5/8—1 1/8 INCH	H	662	341	1505	644
SPEED WRENCH	J		130		
SPANNER WRENCH (1 OR 2 LUGS)	K	662	341		
STRAP WRENCH (10—20 INCH HANDLE)	L	1121	627		

5—10 THREADS

TYPE OF TOOL		UNOBSTRUCTED/ UNRESTRICTED RESISTANCE		OBSTRUCTED/ RESTRICTED	
		HEAVY E	NORMAL F	HEAVY G	NORMAL H
YANKEE SCREWDRIVER	A		132		
NUTDRIVER OR SCREWDRIVER	B		286		

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	OHMSTOP ELEMENT	TMU VALUE
FFD	U	MAA	TTFITXX	TTLFIXX	

OPERATION/ELEMENT DESCRIPTION

5-10 THREADS(CONT'D)

		UNOBSTRUCTED/ UNRESTRICTED RESISTANCE		OBSTRUCTED/ RESTRICTED	
		HEAVY—NORMAL		HEAVY—NORMAL	
		E	F	G	H
T-HANDLE WRENCH NO RESISTANCE TO SPIN	C		319		
NORMAL RESIST. AFTER START	D		486		
ALLEN WRENCH	E	1213	460		1744
RATCHET WRENCH	F	826	247		
OPEN OR BOX END, BREAKOVER,OR ADJUSTABLE WRENCH THREAD DIAMETER					
TO 5/8 INCH	G	1213	263	3332	534
5/8-1 1/8 INCH	H	1682	606	3905	939
SPEED WRENCH	J		190		
SPANNER WRENCH (1 OR 2 LUGS)	K	1682	606		
STRAP WRENCH (10-20 IN. HDL)	L	2621	892		

10-15 THREADS

		UNOBSTRUCTED/ UNRESTRICTED RESISTANCE		OBSTRUCTED/ RESTRICTED	
		HEAVY—NORMAL		HEAVY—NORMAL	
		J	K	L	M
YANKEE SCREWDRIVER	A		167		
NUTDRIVER OR SCREWDRIVER	B		415		
T-HANDLE WRENCH NO RESISTANCE TO SPIN	C		469		
NORMAL RESIST. AFTER START	D		684		
ALLEN WRENCH	E	1933	610		2196
RATCHET WRENCH	F	1281	302		
OPEN OR BOX END, BREAKOVER,OR ADJUSTABLE WRENCH THREAD DIAMETER					
TO 5/8 INCH	G	1933	318	5372	589
5/8-1 1/8 INCH	H	2702	871	6305	1234
SPEED WRENCH	J		250		
SPANNER WRENCH (1 OR 2 LUGS)	K	2702	871		
STRAP WRENCH (10-20 IN. HDL)	L	4121	1157		

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	NAA	TTFRTXX	TTLFRXX	TABLE	FASTENER(THREADED),REMOVE WITH HAND TOOL

FASTENER(THREADED),REMOVE WITH HAND TOOL
STARTS—WITH TOOL IN HAND AT FASTENER
INCLUDES—ALL MOTIONS NECESSARY TO ENGAGE TOOL
  ON FASTENER,LOOSEN FASTENER,TURN FASTENER WITH
  TOOL AS NECESSARY,DISENGAGE TOOL,GET FASTENER
  WITH FINGERS,TURN FASTENER OUT REMAINING
  THREADS BY HAND
ENDS—WITH FASTENER IN HAND
CONDITIONS—NO TIME INCLUDED TO GET/ASIDE TOOL.

TO FIVE THREADS

TYPE OF TOOL		UNOBSTRUCTED/UNRESTRICTED RESISTANCE		OBSTURCTED/RESTRICTED RESISTANCE	
		HEAVY (A)	NORMAL (B)	HEAVY (C)	NORMAL (D)
YANKEE SCREWDRIVER	A		76		
NUTDRIVER OR SCREWDRIVER	B		162		
T-HANDLE WRENCH NO RESISTANCE AFTER LOOSEN	C		115		
NORMAL RESIST. AFTER LOOSEN	D		212		
ALLEN WRENCH	E	521	277		852
RATCHET WRENCH REMOVE WITH TOOL ONLY	F	364			
LOOSEN W/TOOL, REMOVE BY HAND	G		168		
OPEN OR BOX END, BREAKOVER,OR ADJUSTABLE WRENCH THREAD DIAMETER					
TO 5/8 INCH	H	336	184	871	455
5/8—1 1/8 INCH	J	487	317	1060	620
SPEED WRENCH	K		105		
SPANNER WRENCH (1 OR 2 LUGS)	L	487	317		
STRAP WRENCH (10—20—INCH HANDLE)	M	850	603		

5—10 THREADS

		UNOBSTRUCTED/UNRESTRICTED RESISTANCE		OBSTRUCTED/RESTRICTED RESISTANCE	
		HEAVY (E)	NORMAL (F)	HEAVY (G)	NORMAL (H)
YANKEE SCREWDRIVER	A		111		
NUTDRIVER OR SCREWDRIVER	B		267		

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWGSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	AAA	TTFRTXX	TTLFRXX		

5-10 THREADS(CONT.D)

OPERATION/ELEMENT DESCRIPTION	UNOBSTRUCTED/ UNRESTRICTED		OBSTRUCTED/ RESTRICTED	
	RESISTANCE			
	HEAVY E	NORMAL F	HEAVY G	NORMAL H
T-HANDLE WRENCH NO RESISTANCE AFTER LOOSEN	C	190		
NORMAL RESIST. AFTER LOOSEN	D	410		
ALLEN WRENCH	E 1241	427		1304
RATCHET WRENCH REMOVE WITH TOOL ONLY	F 819			
LOOSEN W/TOOL, REMOVE BY HAND	G	223		
OPEN OR BOX END, BREAKOVER,OR ADJUSTABLE WRENCH THREAD DIAMETER				
TO 5/8 INCH	H 1056	239	2911	510
5/8-1 1/8 INCH	J 1507	582	3460	915
SPEED WRENCH	K	165		
SPANNER WRENCH (1 OR 2 LUGS)	L 1507	582		
STRAP WRENCH (10-20 INCH HANDLE)	N 2350	868		

10-15 THREADS

OPERATION/ELEMENT DESCRIPTION	UNOBSTRUCTED/ UNRESTRICTED		OBSTRUCTED/ RESTRICTED	
	RESISTANCE			
	HEAVY J	NORMAL K	HEAVY L	NORMAL N
YANKEE SCREWDRIVER	A	146		
NUTDRIVER OR SCREWDRIVER	B	372		
T-HANDLE WRENCH NO RESISTANCE AFTER LOOSEN	C	265		
NORMAL RESIST. AFTER LOOSEN	D	608		
ALLEN WRENCH	E 1961	577		1756
RATCHET WRENCH REMOVE WITH TOOL ONLY	F 1274			
LOOSEN W/TOOL REMOVE BY HAND	G	278		

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	TTFRTXX	TTLFRXX		10-15 THREADS(CONT'D)

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<tr><td></td><td colspan="2">UNOBSTRUCTED/
UNRESTRICTED</td><td colspan="2">OBSTRUCTED/
RESTRICTED</td></tr>
<tr><td></td><td colspan="4">RESISTANCE</td></tr>
<tr><td></td><td colspan="2">HEAVY-NORMAL</td><td colspan="2">HEAVY-NORMAL</td></tr>
<tr><td></td><td>J</td><td>K</td><td>L</td><td>M</td></tr>
<tr><td>OPEN OR BOX END,
BREAKOVER,OR
ADJUSTABLE
WRENCH
THREAD DIAMETER</td><td></td><td></td><td></td><td></td></tr>
<tr><td>TO 5/8 INCH</td><td>H 1776</td><td>294</td><td>4951</td><td>565</td></tr>
<tr><td>5/8-1 1/8 INCH</td><td>J 2527</td><td>847</td><td>5860</td><td>1210</td></tr>
<tr><td>SPEED WRENCH</td><td>K</td><td>225</td><td></td><td></td></tr>
<tr><td>SPANNER WRENCH
(1 OR 2 LUGS)</td><td>L 2527</td><td>847</td><td></td><td></td></tr>
<tr><td>STRAP WRENCH
(10-20 INCH
HANDLE</td><td>M 3856</td><td>1133</td><td></td><td></td></tr>
</table>

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DFF	U	MAA	KTFAWXX	TTLFTXX	TABLE	FASTENER(THREADED),TIGHTEN OR LOOSEN ONE

THREAD,WITH END WRENCH,ALLEN WRENCH OR SIMILAR
STARTS-WITH GET WRENCH
INCLUDES-ALL THE MOTIONS NECESSARY TO POSITION
WRENCH TO FASTENER,TURN FASTENER ONE THREAD TO
SEAT,APPLY PRESSURE TO WRENCH TO TIGHTEN
FASTENER,REMOVE WRENCH FROM FASTENER,AND ASIDE
WRENCH;OR POSITION WRENCH TO FASTENER,APPLY
PRESSURE TO WRENCH TO LOOSEN FASTENER,TURN
FASTENER OUT ONE THREAD WITH WRENCH,REMOVE
WRENCH FROM FASTENER,AND ASIDE WRENCH
ENDS-WITH RELEASE OF WRENCH
CONDITIONS-APPLICABLE TO TIGHTENING OR
LOOSENING SETSCREW OR SIMILAR.DOES NOT
INCLUDE INSTALLATION OR REMOVAL OF FASTENER.

		DEGREES FASTENER TURNED (PER MOVE OF WRENCH)		
		60 A	120 B	180 C
FIRST FASTENER	A	310	210	174
EACH ADD'L FASTENER	B	264	164	128
EACH ADD'L THREAD	C	233	133	97

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DL	U	NAL	TTLHUXX	TTLHUXX	TABLE	HAMMER,USE,STRIKE ONE BLOW

STARTS—WITH REACH TO HAMMER
INCLUDES—ALL MOTIONS NECESSARY TO GET HAMMER,
  POSITION FOR STRIKING,STRIKE ONE BLOW,AND
  ASIDE HAMMER
ENDS—WITH RELEASE OF HAMMER
CONDITIONS—TIME VALUES IN COLUMNS C AND D
  INCLUDE ALIGNMENT OF HAMMER TO OBJECT BEFORE
  STRIKING BLOW

LENGTH OF STROKE (INCHES)		LIGHT HAMMER(TO 2.5 POUNDS)			
		NORMAL		WITH CARE	
		FIRST BLOW	ADD BLOW	FIRST BLOW	ADD BLOW
		A	B	C	D
1-3	A	63	8	74	16
3-9	B	72	17	83	25
9-15	C	81	26	92	34
15-21	D	90	35		
21-27	E	98	43		

LENGTH OF STROKE (INCHES)		MEDIUM HAMMER(2.5-7.5 POUNDS)			
		NORMAL		WITH CARE	
		FIRST BLOW	ADD BLOW	FIRST BLOW	ADD BLOW
		A	B	C	D
1-3	F	70	9	81	17
3-9	G	79	18	90	26
9-15	H	89	28	100	36
15-21	J	98	37		
21-27	K	107	66		

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
OFF	U	NAA	RLGDM03	TTLPLXX	TABLE	PART,LOOSEN WITH MALLET AND REMOVE

STARTS—WITH MALLET IN HAND
INCLUDES—ALL THE MOTIONS NECESSARY TO STRIKE
  PART WITH A MALLET TO LOOSEN,GET AND ASIDE
  LOOSENED PART
ENDS—WITH PART ASIDE,MALLET IN HAND
CONDITIONS—PART WEIGHS UP TO 10 POUNDS.ONE
  INCH AVERAGE ENGAGEMENT.MALLET WEIGHS 2.5 TO
  7.5 POUNDS

NUMBER OF BLOWS		LENGTH OF STROKE(INCHES)				
		A	B	C	D	E
		1-3	3-9	9-15	15-21	21-27
1	A	39	48	58	67	77
2	B	48	66	86	104	122
3	C	57	84	114	141	168
4	D	66	102	142	177	214
5	E	75	120	170	214	260

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	NAA	BTLSPXX	TTLSPXX	TABLE	SCREWDRIVER(SPIRAL),USE

STARTS—WITH SCREWDRIVER IN PLACE,READY TO USE
INCLUDES—ALL MOTIONS NECESSARY TO MAKE ONE UP
  AND ONE DOWN STROKE WITH SPIRAL SCREWDRIVER
ENDS—WITH TOOL IN PLACE AFTER USE
CONDITION—APPLIES TO RESISTANCE ON THE DOWN
  STROKE OF UP TO 7.5 POUNDS EFFECTIVE NET
  WEIGHT

		LENGTH OF STROKE (INCHES)				
		2	3	4	5	6
		A	B	C	D	E
PER STROKE	A	10	12	15	17	19
PER THREAD	B	10	8	7	7	6

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BTLWBXX	TTLWBXX	TABLE	WRENCH,USE,BOX END,OPEN END,ALLEN WRENCH OR SIMILAR

STARTS-WITH TOOL IN HAND,READY FOR USE
INCLUDES-ALL MOTIONS NECESSARY TO USE WRENCH
 AS INDICATED
ENDS-WITH WRENCH REMOVED FROM PART AND IN HAND
CONDITION-APPLICABLE TO MOVE TURN MOTIONS,UP
 TO 2.5 POUNDS EFFECTIVE NET WEIGHT RESISTANCE,
 ONE DISENGAGE AND ONE POSITION INCLUDED FOR
 EACH TURN

		DEGREES TURNED EACH MOVE			
THREAD DIAMETER(INCHES)		30	60	120	180
		A	B	C	D
UP TO 5/8					
FIRST MOVE	A	30	33	37	41
ADDITIONAL MOVE	B	34	40	48	56
FIRST THREAD	C	404	233	133	97
ADDITIONAL THREAD	D	408	240	144	112
5/8-1 1/8					
FIRST MOVE	E	33	38	46	54
ADDITIONAL MOVE	F	40	50	68	85
FIRST THREAD	G	473	288	182	139
ADDITIONAL THREAD	H	480	300	204	170

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BTLWRXX	TTLWRXX	TABLE	RATCHET,USE TO TURN PART

STARTS-WITH SOCKET ON PART TO BE TURNED
INCLUDES-ALL MOTIONS NECESSARY TO MAKE FORWARD
 AND RETURN STROKES TO TURN PART AS INDICATED
ENDS-WITH SOCKET ON PART
CONDITIONS-APPLICABLE TO MOVE TURN MOTIONS
 WITH UP TO 2.5 POUNDS EFFECTIVE NET WEIGHT
 RESISTANCE(ENW)AND TO WRIST TURN MOTIONS WITH
 UP TO 2.0 POUNDS ENW.DOES NOT INCLUDE TIME FOR
 ENGAGE AND DISENGAGE RATCHET(SEE BTL-WR-01)

		DEGREES TURNED EACH MOVE			
SIZE OF RATCHET AND TYPE OF MOTION		30	60	120	180
		A	B	C	D
MOVE MOTION					
1/4-3/8 INCH DRIVE					
PER MOVE	A	10	15	21	29
PER THREAD	B	118	88	63	58
1/2 INCH DRIVE					
PER MOVE	C	12	18	30	42
PER THREAD	D	146	107	91	83
WRIST TURN MOTION					
PER TURN	E	6	8	14	19
PER THREAD	F	67	49	41	38

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
DFF	U	HAA	KTFXXXX	STLFIXX	TABLE	FASTENER(THREADED),INSTALL

STARTS—WITH GET FASTENER
INCLUDES—ALL MOTIONS NECESSARY TO PLACE
FASTENER IN HOLE,START THREADS OR GET NUT/
WASHER AND START ON BOLT,GET TOOL(S),AND TURN
FASTENER DOWN ON THREADS AND TIGHTEN
ENDS—WITH ASIDE TOOL(S)
CONDITIONS,APPLICABLE TO INSTALLATION OF BOLT
OR SCREW.CASES CG,DG,GG,HG,CS,DS,GS,AND HS
INCLUDE TIME TO USE PLIERS TO INSTALL BOLT
AND/OR WASHER AND START NUT ON THREADS.

		5-10 THREADS UNRESTRICTED		OBSTRUCTED	
TYPE OF TOOL		PLAIN A	SELF LOCKING B	PLAIN C	SELF LOCKING D
ALLEN WRENCH					
FIRST BOLT	A	517		1801	
ADDITIONAL	B	479		1763	
BOX OR OPEN END,BREAKOVER, ADJUSTABLE WR. (TO 5/8 INCH THREAD DIA.)					
FIRST BOLT	C	320	1726	591	3845
ADDITIONAL	D	282	1688	553	3807
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	E	487	1893		
ADDITIONAL	F	411	1817		
NUT & WASHER ON STUD					
FIRST	G	416	1822	1481	4281
ADDITIONAL	H	378	1784		
RATCHET WR.					
FIRST BOLT	J	304	1339		
ADDITIONAL	K	266	1301		
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	L	471	1506		
ADDITIONAL	M	395	1430		
SCREWDRIVER/ NUTDRIVER					
FIRST BOLT	N	343	925		
ADDITIONAL	P	305	887		
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	Q	521	1092		
ADDITIONAL	R	445	1016		
BOLT,WASHER, AND NUT(USE BACKUP TOOL)					
FIRST	S	594	1165	760	1434
ADDITIONAL	T	518	1089		

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE
DFF	U	MAA	KTFXXXX	STLFIXX	

OPERATION/ELEMENT DESCRIPTION

| | | 10-15 THREADS | | | |
| | | UNRESTRICTED | | OBSTRUCTED | |
		PLAIN E	SELF LOCKING F	PLAIN G	SELF LOCKING H
ALLEN WRENCH					
FIRST BOLT	A	667		2253	
ADDITIONAL	B	629		2215	
BOX OR OPEN END, BREAKOVER, ADJUSTABLE WR. (5/8 INCH THREAD DIA.)					
FIRST BOLT	C	375	2731	646	6170
ADDITIONAL	D	337	2693	608	6132
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	E	542	2898		
ADDITIONAL	F	466	2822		
NUT & WASHER ON STUD					
FIRST	G	471	2827	1536	6606
ADDITIONAL	H	433	2789		
RATCHET WR.					
FIRST BOLT	J	359	2079		
ADDITIONAL	K	321	2041		
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	L	526	2246		
ADDITIONAL	M	450	2170		
SCREWDRIVER/ NUTDRIVER					
FIRST BOLT	N	472			
ADDITIONAL	P	434			
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	Q	652	1567		
ADDITIONAL	R	576	1491		
BOLT, WASHER, AND NUT (USE BACKUP TOOL)					
FIRST	S	725	1640	975	1909
ADDITIONAL	T	649	1564		

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DFF	J	MAA	KTFXXXX	STLFRXX	TABLE	

FASTENER(THREADED),REMOVE
STARTS-WITH GET TOOL(S)
INCLUDES-ALL MOTIONS NECESSARY TO LOOSEN AND
  REMOVE FASTENER(S)AND TO ASIDE FASTENER(S)
  AND TOOL(S)
ENDS-WITH RELEASE OF FASTENER(S)AND TOOL(S)
CONDITIONS-APPLICABLE TO REMOVAL OF BOLT,
  SCREW,AND/OR NUT.NO TIME INCLUDED FOR TOOL
  SETUP.

| | | 5-10 THREADS | | | |
| | | UNRESTRICTED | | OBSTRUCTED | |
TYPE OF TOOL		PLAIN A	SELF LOCKING B	PLAIN C	SELF LOCKING D
ALLEN WRENCH					
FIRST BOLT	A	470		1360	
ADDITIONAL	B	432		1322	
BOX OR OPEN END,BREAKOVER, ADJUSTABLE WR. (TO 5/8 INCH THREAD DIA.)					
FIRST BOLT	C	295	1511	566	3366
ADDITIONAL	D	257	1473	528	3328
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	E	407	1623		
ADDITIONAL	F	331	1547		
RATCHET WR.					
FIRST BOLT	G	279	1318		
ADDITIONAL	H	241	1280		
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	J	391	1430		
ADDITIONAL	K	315	1354		
SCREWDRIVER/ NUTDRIVER					
FIRST BOLT	L	323	891		
ADDITIONAL	M	280	853		
BOLT AND NUT (USE BACKUP TOOL)					
FIRST	N	402	1003		
ADDITIONAL	P	321	927		

| | | 10-15 THREADS | | | |
| | | UNRESTRICTED | | OBSTRUCTED | |
		PLAIN E	SELF LOCKING F	PLAIN G	SELF LOCKING H
ALLEN WRENCH					
FIRST BOLT	A	620		1812	
ADDITIONAL	B	582		1774	

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DFF	U	MAA	KTFXXXX	STLFRXX		

10-15 THREADS(CONT'D)
UNRESTRICTED   OBSTRUCTED

			PLAIN E	SELF LOCKING F	PLAIN G	SELF LOCKING H
BOX OR OPEN END,BREAKOVER, ADJUSTABLE WR. (TO 5/8 INCH THREAD DIA.)						
FIRST BOLT	C		350	2516	621	5691
ADDITIONAL	D		312	2478	583	5653
BOLT AND NUT (USE BACKUP TOOL)						
FIRST	E		462	2628		
ADDITIONAL	F		386	2552		
RATCHET WR.						
FIRST BOLT	G		334	2058		
ADDITIONAL	H		296	2020		
BOLT AND NUT (USE BACKUP TOOL)						
FIRST	J		446	2170		
ADDITIONAL	K		370	2094		
SCREWDRIVER/ NUTDRIVER						
FIRST BOLT	L		428			
ADDITIONAL	M		385			
BOLT AND NUT (USE BACKUP TOOL)						
FIRST	N		533	1478		
ADDITIONAL	P		457	1402		

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFE	U	MAA	KTFTQXX	STLFTXX	VARIABLE	FASTENER(THREADED),TORQUE WITH SNAP TYPE TORQUE WRENCH

STARTS—WITH GET TORQUE WRENCH
INCLUDES—ALL MOTIONS NECESSARY TO SET TO
CORRECT TORQUE READING,GET SOCKET FROM OPEN
BOX,ATTACH SOCKET TO TORQUE WRENCH,TORQUE
FASTENER,REMOVE SOCKET,PLACE IN BOX,AND RETURN
TORQUE SETTING TO ZERO
ENDS—WITH ASIDE TORQUE WRENCH
CONDITIONS—WRENCH HANDLE—7-12 INCHES,
RESISTANCE TO TURN—TO 17.5 POUNDS ENW,THREAD
DIAMETER—TO 5/16 INCH

| | | | | | 361 | CASE 01 SET UP WRENCH AND TORQUE FIRST OR SINGLE FASTENER |
| | | | | | 77 | 02 TORQUE ADDITIONAL FASTENER(SAME SOCKET,SAME TORQUE SETTING) |

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFD	U	MAA	KTLTTXX	STLHTXX	VARIABLE	HOLE,TAP

STARTS—WITH REACH TO GET PIN VISE
INCLUDES—ALL THE MOTIONS NECESSARY TO GET PIN
VISE,INSTALL TAP IN PIN VISE,PLACE TAP TO WORK
AND TAP ONE THREAD,CLEAR THREADS,REMOVE TOOL
FROM HOLE,REMOVE TAP FROM PIN VISE AND ASIDE
VISE AND TAP
ENDS—WITH VISE AND TAP ASIDE
CONDITIONS—DOES NOT INCLUDE LUBRICATION,UP TO
10 POUNDS RESISTANCE TO TURNS

					625	CASE 01 TAP FIRST THREAD,FIRST HOLE
					283	02 TAP FIRST THREAD,EACH ADDITIONAL HOLE TO NINE INCHES FROM PRIOR HOLE
					130	03 TAP EACH ADDITIONAL THREAD

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	OWNSTOP ELEMENT	THRU VALUE	OPERATION/ELEMENT DESCRIPTION

FFE	U	MAA	GMCHPXX	STLPPXX	VARIABLE	PUMP(PRESSURE),PUMP
						  STARTS—WITH REACH TO PUMP HANDLE
						  INCLUDES—ALL THE MOTIONS NECESSARY TO GET PUMP
						    HANDLE AND INSERT IN PUMP(CASE 01)OR GRASP
						    HANDLE IN PUMP(CASE 02)AND MOVE HANDLE UP AND
						    DOWN(PUMPING MOTIONS)TO PUMP UP PRESSURE
						  ENDS—WITH REMOVE AND ASIDE HANDLE(CASE 01)OR
						    WITH RELEASE HANDLE (CASE 02)

					119	CASE 01 FIRST STROKE,GET,INSERT,ASIDE HANDLE; RESISTANCE BOTH WAYS
					51	02 FIRST STROKE,HANDLE IN PUMP,RESISTANCE ONE WAY
					42	03 EACH ADDITIONAL STROKE,RESISTANCE BOTH WAYS
					34	04 EACH ADDITIONAL STROKE,RESISTANCE ONE WAY ONLY

DNO	U	MAO	L81-K13	STLRA01	572	REAMER,ASSEMBLE,POSITION,DISASSEMBLE
						  STARTS—WITH REACH TO GET HANDLE
						  INCLUDES—ALL THE MOTIONS NECESSARY TO GET
						    HANDLE,GET REAMER,INSTALL REAMER IN HANDLE,
						    LUBRICATE REAMER,BLOW CHIPS FROM HOLE,POSITION
						    REAMER TO HOLE,DISENGAGE REAMER FROM HOLE,
						    REMOVE REAMER FROM HANDLE,ASIDE REAMER AND
						    HANDLE
						  ENDS—WITH ASIDE REAMER AND HANDLE

FFE	U	MAA	RLGDBZX	STLRFXX	VARIABLE	FITTING(ZERK),REMOVE
						  STARTS—WITH REACH TO GET TOOL
						  INCLUDES—ALL THE MOTIONS NECESSARY TO GET TOOL
						    AND POSITION ON FITTING,LOOSEN AND RUN OUT
						    FITTING,ASIDE TOOL,REMOVE FITTING AND ASIDE
						    TO TRASH
						  ENDS—WITH FITTING IN TRASH
						  CONDITIONS—RUN OUT 5 TO 10 THREADS

					874	CASE 01 STRAIGHT FITTING,RATCHET WRENCH,HEAVY
						        RESISTANCE,UNOBSTRUCTED,120 DEGREE
						        TURNS

					1111	02 ANGULAR FITTING,BOX,OPEN END,BREAKOVER
						        OR ADJUSTABLE WRENCH,UNOBSTRUCTED,
						        HEAVY RESISTANCE,THREAD DIAMETER UP TO
						        AND INCLUDING 5/8 INCH

NF	U	MAF	1148	BTPWP01	54	WRENCH(IMPACT),POSITION TO BOLT OR NUT
						  STARTS—WITH MOVE WRENCH TO BOLT OR NUT
						  INCLUDES—ALL THE MOTIONS NECESSARY TO POSITION
						    AN IMPACT WRENCH TO RUN DOWN A BOLT OR NUT
						  ENDS—WITH WRENCH IN HAND READY TO RUN DOWN
						    BOLT OR NUT
						  CONDITION—WRENCH WEIGHING TO 10 POUNDS

FFH	U	MAA	BTLWPXX	BTPWTXX	VARIABLE	WRENCH,TURN PART(POWER WRENCH,FREE RUNNING)
						  STARTS—WITH MOVE WRENCH TO PART
						  INCLUDES—ALL MOTIONS NECESSARY TO MOVE WRENCH
						    TO PART,ATTACH WRENCH TO PART,AND DISENGAGE
						    FROM PART
						  ENDS—WITH WRENCH IN HAND,REMOVED FROM PART

					30	CASE 02 MOVE WRENCH 1-3 INCHES BETWEEN PARTS
					35	06 MOVE WRENCH 3-9 INCHES BETWEEN PARTS
					39	12 MOVE WRENCH 9-15 INCHES BETWEEN PARTS
					43	18 MOVE WRENCH 15-21 INCHES BETWEEN PARTS

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DL	U	MAL	MTPDPXX	MTPDPXX	VARIABLE	DRILL,POSITION FOR DRILLING,HAND HELD PORTABLE POWER DRILL STARTS—WITH REACH TO DRILL INCLUDES—ALL MOTIONS NECESSARY TO GET DRILL, POSITION TO MARK OR PILOT HOLE,APPLY PRESSURE TO HOLD DRILL,ACTUATE TRIGGER-TYPE SWITCH, RELEASE SWITCH,REMOVE DRILL FROM HOLE,AND ASIDE DRILL ENDS—WITH RELEASE DRILL CONDITIONS—DRILL WEIGHS TO 10 POUNDS.DOES NOT INCLUDE DRILLING PROCESS TIME.APPLICABLE TO PLACING DRILL IN UNOBSTRUCTED LOCATION.
					133	CASE 01 POSITION TO DRILL FIRST OR SINGLE HOLE
					83	02 POSITION TO DRILL EACH ADDITIONAL HOLE (TO 12 INCHES BETWEEN HOLES)
FFD	U	MAA	TTFITXX	MTPFIXX	VARIABLE	FASTENER(THREADED),INSTALL WITH POWER TOOL STARTS—WITH FASTENER AND POWER TOOL IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO START FASTENER WITH HAND AND RUN DOWN AND TIGHTEN WITH POWER TOOL ENDS—WITH DISENGAGE TOOL
					83	CASE 01 TO FIVE THREADS
					108	02 5-10 THREADS
					133	03 10-15 THREADS
FFD	U	MAA	TTFRTXX	MTPFRXX	VARIABLE	FASTENER(THREADED),REMOVE WITH POWER TOOL STARTS—WITH ENGAGE TOOL WITH FASTENER INCLUDES—ALL THE MOTIONS NECESSARY TO PROCESS AND RUN OFF FASTENER WITH POWER TOOL ENDS—WITH FASTENER ASIDE
					86	CASE 01 TO FIVE THREADS
					111	02 5-10 THREADS
					136	03 10-15 THREADS
FFH	U	MAA	MTLPDXX	MTPHCXX	VARIABLE	HOLE,COUNTERSINK OR DEBURR,1/16 INCH DEPTH AND TO 5/8 INCH DIAMETER,ALUMINUM MATERIAL STARTS—WITH REACH TO DRILL INCLUDES—ALL MOTIONS NECESSARY TO GET DRILL, COUNTERSINK OR DEBURR ONE HOLE WITH PORTABLE ELECTRIC OR PNEUMATIC DRILL AND COUNTERSINK, AND PLACE DRILL ASIDE ENDS—WITH RELEASE OF DRILL CONDITIONS—DRILL WITH 1/4 INCH CAPACITY USED; TIME FOR INSTALLING COUNTERSINK IN DRILL NOT INCLUDED
					151	CASE 01 COUNTERSINK OR DEBURR FIRST OR SINGLE HOLE
					111	02 COUNTERSINK OR DEBURR ADDITIONAL HOLE
NF	U	MAF	1140	MTPTD01	240	TOOL(ELECTRIC POWER),DISCONNECT AND WIND CORD AROUND TOOL STARTS—WITH REACH TO PLUG INCLUDES—ALL THE MOTIONS NECESSARY TO REMOVE PLUG FROM SOCKET,WIND CORD AROUND BODY OF TOOL AND SECURE CORD ENDS—WITH TOOL IN HAND CONDITIONS—SOCKET IS AT BENCH LEVEL
NF	U	MAF	3163	MTPTP01	190	TOOL,PLACE IN CHUCK AND TIGHTEN STARTS—WITH REACH TO CHUCK—TOOL IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO OPEN OR CLOSE JAW,POSITION TOOL IN CHUCK,TIGHTEN JAWS BY HAND,TIGHTEN WITH CHUCK WRENCH AND ASIDE WRENCH ENDS—WITH ASIDE WRENCH

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	3162	MTPTK01	120	TOOL,REMOVE FROM CHUCK STARTS—WITH MOVE WRENCH TO CHUCK INCLUDES—ALL THE MOTIONS NECESSARY TO LOOSEN CHUCK WITH CHUCK WRENCH,TURN CHUCK BY HAND AND REMOVE AND ASIDE TOOL ENDS—WITH TOOL ASIDE
NF	U	MAF	1139	MTPTU01	216	TOOL(ELECTRIC POWER),UNWIND CORD AND CONNECT PLUG STARTS—WITH POWER TOOL IN HAND INCLUDES—ALL THE MOTIONS NECESSARY TO UNWIND CORD FROM AROUND BODY OF TOOL AND INSERT PLUG INTO A SOCKET ENDS—WITH RELEASE OF PLUG CONDITIONS—SOCKET IS AT BENCH LEVEL
FFE	U	MAA	GTFPAXX	STPFIXX	VARIABLE	FASTENER(THREADED),INSTALL WITH POWER TOOL STARTS—WITH GET FASTENER INCLUDES—ALL MOTIONS NECESSARY TO START FASTENER,GET POWER TOOL,AND RUN FASTENER DOWN ON THREADS ENDS—WITH ASIDE TOOL CONDITION—NO TIME INCLUDED FOR ALIGNING HOLES. FASTENER INSTALLED TO 10 THREADS.DOES NOT INCLUDE TIME FOR SETUP OF POWER TOOL
					342	CASE 01 INSTALL FIRST FASTENER AND NUT (INCLUDES GET,USE,ASIDE BACKUP TOOL)
					194	02 INSTALL EACH ADDITIONAL FASTENER AND NUT(DOES NOT INCLUDE GET AND ASIDE TOOLS)
					171	03 INSTALL FIRST BOLT TO NUT PLATE OR NUT TO STUD(REQUIRES NO BACKUP TOOL)
					150	04 INSTALL EACH ADDITIONAL FASTENER TO NUT PLATE OR STUD(DOES NOT INCLUDE GET AND ASIDE TOOL)
FFE	U	MAA	GTFPDXX	STPFRXX	VARIABLE	FASTENER(THREADED),REMOVE WITH POWER TOOL STARTS—WITH GET POWER TOOL INCLUDES—ALL MOTIONS NECESSARY TO POSITION TOOL(S) TO FASTENER,RUN OUT FASTENER,REMOVE AND ASIDE FASTENER ENDS—WITH ASIDE TOOL(S) CONDITIONS—NO TIME INCLUDED FOR SETUP OF POWER TOOL
					302	CASE 01 REMOVE FIRST BOLT AND NUT(INCLUDES GET,USE,AND ASIDE BACKUP TOOL)
					200	02 REMOVE EACH ADDITIONAL BOLT AND NUT (DOES NOT INCLUDE GET AND ASIDE TOOLS)
					179	03 REMOVE FIRST BOLT OR NUT FROM NUT PLATE OR STUD(NO BACKUP TOOL)
					132	04 REMOVE EACH ADDITIONAL BOLT OR NUT FROM NUT PLATE OR STUD(DOES NOT INCLUDE GET AND ASIDE TOOL)
DFF	U	MAA	KTLDRA1	STPTI01	486	TOOL,INSTALL IN AND REMOVE FROM CHUCK OF PORTABLE DRILL MOTOR STARTS—WITH GET DRILL MOTOR INCLUDES—ALL MOTIONS NECESSARY TO GET TOOL, PLACE IN CHUCK,HAND TIGHTEN CHUCK,GET CHUCK KEY,TIGHTEN CHUCK,ASIDE CHUCK KEY,GET CHUCK KEY,LOOSEN CHUCK,REMOVE AND ASIDE TOOL,ASIDE CHUCK KEY,AND ASIDE DRILL MOTOR ENDS—WITH RELEASE OF DRILL MOTOR CONDITIONS—DRILL MOTOR WEIGHS TO 10 POUNDS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
DL	U	MAL	MVSPP01	MVSPP01	256	PART,PLACE IN AND REMOVE FROM VISE STARTS-WITH REACH TO VISE HANDLE,PART IN OTHER HAND INCLUDES-ALL MOTIONS NECESSARY TO OPEN VISE BY CRANKING HANDLE TWO REVOLUTIONS,PLACE PART IN VISE,CLOSE AND TIGHTEN VISE,REACH TO PART AND VISE HANDLE,OPEN VISE TWO REVOLUTIONS OF HANDLE,REMOVE PART,AND CLOSE VISE TWO REVOLUTIONS ENDS-WITH RELEASE OF VISE HANDLE,PART IN HAND CONDITIONS-PART WEIGHS 2.5 POUNDS OR LESS.NO TIME INCLUDED TO OBTAIN OR ASIDE PART.
NAA	U	MAA	MVSTLXX	MVSQAXX	VARIABLE	VISE(QUICK ACTING),LOOSEN OR TIGHTEN
FFF	U	MAA	MVSRVXX	MVSRVXX	VARIABLE	VISE,ROTATE STARTS-WITH ONE HAND ON VISE AND OTHER HAND ON INDEX LOCK LEVER INCLUDES-ALL MOTIONS NECESSARY TO UNLOCK VISE, ROTATE,AND LOCK VISE ENDS-WITH ONE HAND ON VISE AND OTHER HAND ON LOCK LEVER CONDITION-LIMITED TO MOVES WITH 2.5 POUNDS OR LESS RESISTANCE
					81	CASE 01 ROTATE VISE UP TO 45 DEGREES
					89	02 ROTATE VISE 45-135 DEGREES
NAA	U	MAA	MVSTLXX	MVSTLXX		VISE,TIGHTEN OR LOOSEN BY HAND STARTS-WITH HAND(S) ON VISE HANDLE INCLUDES-ALL MOTIONS NECESSARY TO TIGHTEN OR LOOSEN A BENCH VISE BY HAND ENDS-WITH HAND(S) ON VISE HANDLE
					31	CASE 01 SMALL VISE,UP TO 9-INCH HANDLE DIAMETER
					39	02 MEDIUM VISE,9-15 INCH HANDLE DIAMETER
					47	03 LARGE VISE,15-21 INCH HANDLE DIAMETER
NF	U	MAF	3966	MVSTSXX	VARIABLE	TRIPOD(WITH VISE),SET UP TO USE OR TAKE DOWN AFTER USE,EFFECTIVE NET WEIGHT TO 30 POUNDS STARTS-WITH VISE IN HAND AT WORKPLACE INCLUDES-ALL MOTIONS NECESSARY TO MOVE VISE INTO POSITION,BEND,OPEN TRIPOD LEGS,AND ARISE (CASE 01);OR BEND TO GET LEGS,CLOSE THREE LEGS,LOWER TRIPOD TO FLOOR,AND ARISE(CASE 02) ENDS-WITH BODY IN ERECT POSITION
					313	CASE 01 SET UP TRIPOD
					278	02 TAKE DOWN TRIPOD
NF	U	MAF	4104	MVSVC01	291	VISE(BENCH),OPEN AND CLOSE(1/4 INCH) STARTS-WITH A REACH TO VISE HANDLE INCLUDES-ALL THE MOTIONS NECESSARY TO OPEN AND CLOSE A HAND OPERATED BENCH VISE ENDS-WITH RELEASE OF VISE HANDLE
AF	U	OBW	32814	MVSVT01	173	VISE,TIGHTEN AND LOOSEN WITH WRENCH STARTS-WITH REACH TO WRENCH INCLUDES-ALL THE MOTIONS NECESSARY TO GET A WRENCH,POSITION ON TIGHTENING SCREW,TIGHTEN, AND LOOSEN AND ASIDE WRENCH ENDS-WITH RELEASE OF WRENCH ASIDE CONDITIONS-TIGHTEN WITH ONE 180 DEGREE TURN

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BWHRFXX	BWHCRXX	VARIABLE	CABLE,ROUTE THROUGH FRAME OPENING

STARTS—WITH LEFT HAND ON CABLE AND RIGHT HAND
  HAS RELEASED PREVIOUS OBJECT
INCLUDES—ALL MOTIONS NECESSARY TO PASS 12
  INCHES OF CABLE THROUGH AS OPENING OF GROMMET
  HOLE IN AL ELECTRICAL CHASSIS OR FRAME
ENDS—WITH LEFT HAND ON CABLE AND RIGHT HAND
  HAS RELEASED CABLE
CONDITIONS—INCLUDES CABLE UP TO 5/8 INCHES IN
  DIAMETER AND WIRE GAGES FROM 12-26. THE
  CABLE HAS BEEN LACED AND THE LEADS PREPARED
  FOR PLACING THE CABLE THRU THE HOLE OR
  OPENING.

					63	CASE 01 LOOSE FIT—WHEN THE HOLE DIAMETER IS 1 INCH (2X1/2) LARGER THAN THE CABLE
					69	02 CLOSE FIT—WHEN THE HOLE DIAMETER IS 1/2 INCH (2X1/4) LARGER THAN THE CABLE
					81	03 TIGHT FIT IS WHEN THE HOLE DIAMETER IS 1/8 INCH (2X1/16)LARGER THAN THE CABLE DIAMETER

| FFH | U | TUA | BWHGH01 | BWHGH01 | 221 | GUN(SOLDER),HEAT TIP TO SOLDER TEMPERATURE |

STARTS—WITH SOLDER GUN IN HAND,FINGER ON
  TRIGGER
INCLUDES—ALL THE TIME NECESSARY TO DEPRESS
  TRIGGER AND HOLD TO HEAT TIP TO SOLDER
  TEMPERATURE
ENDS—WHEN TIP IS AT SOLDER TEMPERATURE
CONDITIONS—ALL WELLER(AND SIMILAR)SOLDER GUNS
  ALL WATTAGES

| FFH | U | MAA | BWHOH01 | BWHHO01 | 20 | HEAT SINK,OPEN AND CLOSE |

STARTS—WITH FINGERS ON HEAT SINK,PREPARATORY
  TO OPENING
INCLUDES—ALL THE MOTIONS NECESSARY TO OPEN AND
  CLOSE HEAT SINK
ENDS—WITH THE CLOSING OF THE HEAT SINK

| FFH | U | MAA | BWHSM01 | BWHIS01 | 49 | INSULATION,STRIP FROM WIRE TO ONE INCH |

STARTS—WITH STRIPPERS ON WIRE AND READY FOR
  STRIPPING ELEMENT
INCLUDES—ALL MOTIONS NECESSARY TO STRIP WIRE
ENDS—WHEN THE STRIPPER LEAVES THE WIRE AND
  READY FOR NEXT MOTION
CONDITIONS—HAND OPERATED STRIPPER,WIRE
  DIAMETER IS SET PROPERLY AND NEEDS NO ADJUST-
  MENT.WIRE 12-26 GAGE SINGLE CONDUCTOR OR
  STRANDED,NON SHIELDED,PLASTIC OR FIBER
  INSULATION

| FFH | U | MAA | BWHTCXX | BWHITXX | VARIABLE | IRON(SOLDERING),TIN |

STARTS—WITH SOLDER IN POSITION FOR FIRST
  SOLDER APPLICATION
INCLUDES—ALL MOTION NECESSARY TO TIN
  SOLDERING IRON TIP
ENDS—WITH SOLDERING IRON HELD IN ONE HAND AND
  SOLDER IN OTHER HAND,CLOSE TO IRON TIP
CONDITIONS—37.5 TO 47.5 WATT IRON WITH
  1/8 TO 3/16 INCH TIP.60 TIN/40 LEAD RESIN CORE
  SOLDER. MOVES REQUIRED TO APPLY SOLDER LIMIT
  OUT SOLDER MELT PROCESS TIME. APPLICABLE TO
  TINNING WIRE LEAD.

					6	CASE 01 TIN SOLDERING IRON TIP BEFORE SOLDERING
					51	02 TIN SOLDERING IRON AFTER CLEANING
					49	03 TIN WIRE LEAD END WITH SOLDERING IRON

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BWHLTXX	BWHLT01	VARIABLE	LACE,TIE CLOVE HITCH AND OVERHAND KNOT STARTS-WITH CABLE IN LEFT HAND,AND CORD HELD IN POSITION AT CABLE INCLUDES-ALL THE MOTIONS NECESSARY TO TIE A KNOT TO START OR END LACING OF CABLE,OR TO TIE SINGLE KNOT ON CABLE ENDS-WITH KNOT COMPLETED AND CORD IN HANDS CONDITIONS-WAXED LACING CORD
					208	CASE 01 TIE CLOVE HITCH AND OVERHAND KNOT
					458	02 TIE CLOVE HITCH AND OVERHAND KNOT IN CHASSIS
FFH	U	MAA	BWHLU11	BWHLU01	30	LACING(CORD),UNWIND FROM SPOOL PER FOOT STARTS-WITH SPOOL IN RIGHT HAND AND LEFT HAND REACH TO CORD WITH LEFT HAND INCLUDES-ALL THE MOTIONS NECESSARY TO UNWIND EACH FOOT OF LACING CORD FROM SPOOL ENDS-WITH RIGHT HAND HOLDING SPOOL AND LEFT HAND HAS RELEASED CORD.
FFH	U	MAA	BWHRPXX	BWHRWXX	VARIABLE	WIRE,ROUTE PAST POST,PIN OR OBSTRUCTION STARTS-WITH HAND ON WIRE,AT THE POST,PIN,OR OBSTRUCTION INCLUDES-ALL MOTIONS NECESSARY TO ROUTE WIRE TO 90 DEGREES ARC OR ANGLE AROUND OBSTRUCTION ENDS-AT COMPLETION OF ROUTE WITH HANDS READY TO ROUTE CONDITIONS-WIRE 12-26 GAGE NON SHIELDED SINGLE CONDUCTOR STRANDED WITH PLASTIC OR BRAID INSULATION
					20	CASE 01 ROUTE WIRE AROUND POST,PIN,OR OBSTRUCTION,2 SIDES WITH HANDS
					61	02 ROUTE WIRE AROUND POST,PIN,OR OBSTRUCTION,3 SIDES WITH HANDS
AE	U	MAW	FPLSWXX	BWHSWXX	VARIABLE	WIRE,STRAIGHTEN WITH PLIERS STARTS-WITH WIRE AND PLIERS IN HAND INCLUDES-ALL MOTIONS NECESSARY TO GRIP WIRE AND STRAIGHTEN WIRE WITH PLIERS ENDS-WITH PLIERS IN HAND OVER WIRE
					36	CASE 01 STRAIGHTEN WIRE,FIRST APPLICATION
					22	02 STRAIGHTEN WIRE,EACH ADDITIONAL APPLICATION
FFH	U	MAA	BWHTLXX	BWHTLXX	VARIABLE	LEAD,TWIST ON TERMINAL STARTS-WITH PLIERS IN POSITION TO GRASP LEAD INCLUDES-ALL MOTIONS REQUIRED TO TWIST AND CRIMP ONE LEAD TO A TERMINAL IN PREPARATION FOR SOLDERING LEAD TO TERMINAL ENDS-WITH LEFT HAND HOLDING WIRE OR COMPONENT AND RIGHT HAND READY TO RELEASE THE LEAD CONDITIONS-TERMINALS INCLUDE POST,PIN AND EYELET TYPES,LEAD PREVIOUSLY BENT TO FORM HOOK AND POSITION ON TERMINAL. USE LONG NOSE PLIERS
					120	CASE 01 TWIST WIRE LEAD ON TERMINAL POST,PIN OR EYELET
					109	02 CRIMP COMPONENT ON TERMINAL
FFH	U	MAA	BWHBP02	BWHWBXX	VARIABLE	WIRE,BEND WITH PLIERS STARTS-WITH PLIERS POSITIONED AT POINT ON WIRE INCLUDES-ALL MOTIONS REQUIRED TO BEND WIRE WITH PLIERS ENDS-WITH LEFT HAND HOLDING WIRE,AND RIGHT HAND READY TO MOVE PLIERS AWAY FROM BENT WIRE CONDITIONS-WIRE 12-26 GAGE INSULATED OR BARE
					28	CASE 01 BEND WIRE UP TO 90 DEGREES WITH PLIERS
					32	02 BEND WIRE 90-180 DEGREES WITH PLIERS

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
AE	U	MAW	FPLBW01	BWHWB03	46	WIRE,BEND TO FORM LOOP USING PLIERS STARTS—WITH WIRE IN HAND AND PLIERS POSITIONED ON WIRE INCLUDES—ALL MOTIONS NECESSARY TO BEND WIRE TO PARTIALLY FORM LOOP,REPOSITION PLIERS ON WIRE,AND BEND TO COMPLETE LOOP ENDS—WITH PLIERS IN HAND ENDS—WITH PLIERS IN HAND CONDITION—APPLICABLE TO 14 GAGE STEEL WIRE OR SIMILAR
FFH	U	MAA	BWHBH01	BWHWB04	18	WIRE,BEND UP TO 120 DEGREES WITH HANDS STARTS—WITH HANDS ON WIRE INCLUDES—ALL THE MOTIONS NECESSARY TO BEND WIRE TO 120 DEGREES WITH FINGERS ENDS—AT COMPLETION OF BEND WITH BOTH HANDS ON WIRE READY FOR NEXT MOTION SEQUENCE CONDITION—WIRE 12 TO 26 GAGE,INSULATED OR BARE
FFH	U	MAA	BWHDC01	BWHWD01	99	WIRE,DRESS INTO AN INSIDE CORNER STARTS—AFTER GRASP BY LEFT HAND AND PLIERS IN RIGHT HAND READY FOR DRESS WIRE ELEMENT INCLUDES—ALL MOTIONS NECESSARY TO BEND A STRAIGHT WIRE AND POSITION WIRE INTO CORNER ENDS—WIRE IS POSITIONED IN CORNER WITH LEFT HAND CONDITIONS—THIS COVERS ALL SOLID OR STRANDED COPPER WIRE WITH FABRIC OR PLASTIC COVERING. WIRE GAGE 12 TO 26 INCLUDED. THIS INCLUDES GENERAL CASES WHERE THE WIRE IS CONNECTED AT ONE OR BOTH ENDS AT TIME OF WIRE DRESSING AND OUTSIDE CORNER WHEN WIRE CONNECTED ON ONE END
FFH	U	MAA	BWHRC01	BWHWR01	20	WIRE,ROUTE IN CHANNEL OR AGAINST FRAME STARTS—WITH BOTH HANDS ON WIRES INCLUDES—ALL MOTIONS REQUIRED TO PRESS SEVERAL WIRES INTO PLACE ALONG FRAME OR CHANNEL, MOVE WIRES TO 6 INCHES ENDS—WITH WIRE IN PLACE AND HANDS READY TO MOVE TO NEXT LENGTH OF WIRE,OR START NEXT MOTION SEQUENCE CONDITIONS—WIRE,12-26 GAGE,NON SHIELDED SINGLE CONDUCTOR OR STRANDED WITH PLASTIC OR BRAID INSULATION
FFH	U	MAA	BWHSHXX	BWHWSXX	VARIABLE	WIRE,STRAIGHTEN BY HAND STARTS—AFTER WIRE HAS BEEN GRASPED INCLUDES—ALL MOTIONS REQUIRED TO STRAIGHTEN WIRE BY HAND ENDS—WITH HAND NEAR END OF WIRE CONDITIONS—WIRE,12-26 GAGE,NON SHIELDED SINGLE CONDUCTOR OR STRANDED WITH PLASTIC OR BRAID INSULATION
					23	CASE 01 STRAIGHTEN WIRE 3 INCHES LONG
					27	02 STRAIGHTEN WIRE 3-9 INCHES LONG
					32	03 STRAIGHTEN WIRE 9-15 INCHES LONG

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

FF	U	MAA	BWHTBXX	BWHWTXX	VARIABLE	WIRES,TWIST TO ROUTE THRU OPENING
						  STARTS-WITH LEFT HAND HOLDING CABLE AND REACH
						    TO CABLE WITH RIGHT HAND
						  INCLUDES-ALL MOTIONS NECESSARY TO TWIST WIRE
						    IN PREPARATION TO PLACING CABLE INTO OPENING
						  ENDS-WITH LEFT HAND ON CABLE AND RIGHT HAND
						    READY FOR NEXT MOTION
						  CONDITIONS-WIRE 12-26 GAGE,NON SHIELDED
						    SINGLE CONDUCTOR OR STRANDED WITH PLASTIC OR
						    BRAID INSULATION. INCULDED ARE LEADS FROM
						    1-4 1/2 INCHES IN LENGTH

					62	CASE 01 TWIST BUNDLE 2-10 WIRES TO ROUTE THRU OPENING
					86	02 TWIST BUNDLE 11-30 WIRES TO ROUTE THRU OPENING

FFH	U	MAA	BWHTS01	BWHWT03	32	WIRE,TWIST STRAND OF LEAD
						  STARTS-WITH REGRASP OF WIRE WITH RIGHT HAND
						  INCLUDES-ALL MOTIONS NECESSARY TO TWIST
						    STRANDED WIRE FOR TINNING OR INSULATION
						  ENDS-WITH RELEASE OF WIRE
						  CONDITIONS-STRANDED WIRE,12 TO 26 GAGE,
						    NON-SHIELDED SINGLE CONDUCTOR WITH PLASTIC OR
						    BRAID INSULATION

FF	U	MAA	BWHTB11	BWHWU01	54	WIRES-UNTWIST AFTER ROUTE THRU OPENING
						  STARTS-WITH LEFT HAND HOLDING CABLE AND REACH
						    TO CABLE WITH RIGHT HAND
						  INLCUDES-ALL THE MOTIONS NECESSARY TO UNTWIST
						    THE LEADS OF A CABLE WHEN THEY HAVE BEEN
						    PREVIOUSLY TWISTED
						  ENDS-WITH LEFT HAND HOLDING CABLE AND RIGHT
						    HAND DISENGAGED FROM LEADS
						  CONDITION-WIRE GAGE 12-26

FFH	U	MAA	MWHLCXX	MWHCLXX	VARIABLE	CABLE,LACE WITH KNOT
						  STARTS-WITH GET CORD
						  INCLUDES-ALL THE MOTIONS REQUIRED TO TIE
						    CLOVE HITCH AND OVERHAND KNOT AND CUT EXCESS
						    CORD AFTER TYING
						  ENDS-WITH ASIDE DIAGONAL PLIERS

					305	CASE 01 TIE CLOVE HITCH AND OVERHAND KNOT IN OPEN AREA
					555	02 TIE CLOVE HITCH AND OVERHAND KNOT IN CHASSIS

FFH	U	MAA	MWHWH11	MWHHU01	320	HARNESS,UNWRAP VINYL TAPE FROM 1-3 INCHES OF
						  STARTS-WITH GET CUTTERS
						  INCLUDES-ALL MOTIONS REQUIRED TO GET,PLACE AND
						    ASIDE CUTTERS,CUT,REMOVE AND ASIDE VINYL TAPE
						  ENDS-WITH RELEASE OF CUTTERS

FFH	U	MAA	MWHWH02	MWHHW01	2856	HARNESS,WRAP 1-3 INCHES OF HARNESS WITH 1/2
						  INCH VINYL TAPE-RESTRICTED
						  STARTS-WITH GET ROLL OF VINYL TAPE
						  INCLUDES-MOTIONS TO GET AND ASIDE CUTTER,ROLL
						    OF TAPE,CUT TAPE,WRAP 1-3 INCHES OF HARNESS,
						    ATTACH CLIP BEFORE TYING OR LACING AND REMOVE
						    CLIP
						  ENDS-WITH RELEASE OF CLIP
						  CONDITIONS-1/2 INCH VINYL TAPE. DOES NOT
						    INCLUDE LACING OF HARNESS. HARNESS CLOSE TO
						    CHASSIS,RESTRICTED,REQUIRES THE AID OF PLIERS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION

FF	U	MAA	MWHTCXX	MWHITXX	VARIABLE	IRON(SOLDERING),TIN BEFORE SOLDERING OR AFTER CLEANING
						STARTS—WITH IRON AND SOLDER IN HANDS
						INCLUDES—ALL MOTIONS REQUIRED TO APPLY
						   SUFFICIENT SOLDER TO IRON TIP TO INSURE GOOD
						   CONTACT WHILE SOLDERING
						ENDS—WITH SOLDER NEAR TIP OF SOLDERING IRON
						CONDITIONS—37.5 TO 47.5 WATT IRON WITH
						   1/8 TO 3/16 INCH TIP—SOLDER 60 TIN/40 LEAD,

					37	CASE 01 TIN SOLDERING IRON BEFORE SOLDERING
					78	02 TIN SOLDERING IRON AFTER CLEANING

FFH	U	MAA	MWHCLO1	MWHLCO1	43	LEAD,CHOOSE FROM WIRE BUNDLE
						STARTS—WITH BUNDLE OF WIRES IN HAND
						INCLUDES—ALL THE MOTIONS REQUIRED TO SELECT
						   ONE LEAD FROM A BUNDLE OF WIRES
						ENDS—WITH WIRE ASIDE AND HAND ON WIRE READY
						   FOR NEXT MOTION SEQUENCE
						CONDITIONS—12 TO 26 GAGE WIRE NON-SHIELDED

FFH	U	MAA	MWHDLO1	MWHLDO1	198	LEAD,DRESS WITH PLIERS
						STARTS—WITH LEFT HAND NEAR WIRE AND RIGHT HAND
						   HOLDING PLIERS NEAR TERMINAL
						INCLUDES—ALL THE MOTIONS NECESSARY TO DRESS A
						   WIRE END OR COMPONENT LEAD AT TERMINAL
						ENDS—WITH RELEASE OF PLIERS AND LEFT HAND
						   HOLDING COMPONENT OR WIRE

FFH	U	MAA	MWHLLO1	MWHLMO1	144	LEAD(COMPONENT),MEASURE AND CUT TWO ENDS TO LENGTH
						STARTS—WITH GET LEAD
						INCLUDES—ALL THE MOTIONS REQUIRED TO MEASURE
						   AND CUT TO LENGTH BOTH LEADS OF A COMPONENT
						ENDS—WITH COMPONENT IN LEFT HAND AND CUTTERS
						   IN RIGHT HAND NEAR COMPONENT
						CONDITION—COMPONENTS SUCH AS DIODES AND
						   RESISTORS

FFH	U	MAA	MWHLLO2	MWHLMO2	165	LEAD,MEASURE AND CUT TO LENGTH
						STARTS—WITH REACH TO GET LEAD
						INCLUDES—ALL THE MOTIONS REQUIRED TO MEASURE
						   AND CUT LEAD TO LENGTH
						ENDS—WITH LEAD CUT AND TOOLS ASIDE
						CONDITIONS—STANDARD APPLIES ONLY TO NEW
						   INSTALLATIONS OR REROUTING OF EXISTING LEADS
						   TO NEW LOCATIONS

FFH	U	MAA	MWHSHO1	MWHLSO1	182	LEAD(COMPONENT),STRAIGHTEN WITH HANDS
						STARTS—WITH GET COMPONENT
						INCLUDES—ALL THE MOTIONS NECESSARY TO GET
						   COMPONENT FROM WORK BENCH,ORIENT,CHECK
						   FOR INSULATION AND STRAIGHTEN LEADS BY HAND
						ENDS—WITH ONE HAND HOLDING COMPONENT AND OTHER
						   HAND NEAR SECOND LEAD
						CONDITIONS—COMPONENTS SUCH AS DIODES AND
						   RESISTORS

FFH	U	MAA	MWHTSO1	MWHLTO1	51	LEAD,TWIST STRANDED WIRE BY HAND
						STARTS—WITH REACH TO WIRE END WITH ONE HAND,
						   OTHER HAND HOLDING WIRE
						INCLUDES—ALL THE MOTIONS NECESSARY TO GRASP
						   AND TWIST STRANDED WIRE TWO REVOLUTIONS BY
						   HAND
						ENDS—WITH RELEASE WIRE
						CONDITIONS—STRANDED WIRE,12-26 GAGE

FFH	U	MAA	MWHLU11	MWHLUO1	85	LACING CORD,UNWIND ONE FOOT FROM SPOOL STARTS—WITH REACH TO SPOOL INCLUDES—ALL THE MOTIONS NECESSARY TO GET SPOOL AND UNWIND ONE FOOT OF CORD ENDS—WITH RELEASE OF SPOOL

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	MWHAM01	MWHMA01	418	MARKER(E-Z CODE),APPLY STARTS-WITH REACH TO GET E-Z CODE TAPE CARD INCLUDES-ALL THE MOTIONS REQUIRED TO GET AND ASIDE CARD OF E-Z CODE,GET USE AND ASIDE TOOLS,APPLY E-Z CODE TO ITEM ENDS-WITH LEFT HAND ON CODED ITEM AND FINGERS OF RIGHT HAND ON E-Z CODE TAPE CONDITIONS-FABRIC BACKED TABBED AND DECAL TYPE NON-TABBED E-Z CODE TAPE MARKERS
FFH	U	MAA	MWHAI01	MWHSA01	202	SPAGHETTI,APPLY-MEASURE,CUT AND INSTALL STARTS-WITH GET INSULATION SPAGHETTI FROM BENCH WITH LEFT HAND INCLUDES-ALL THE MOTIONS NECESSARY TO GET, PLACE,MEASURE AND CUT INSULATION SPAGHETTI WITH DIAGONAL CUTTERS,PLACE ON WIRE AND SLIDE DOWN AFTER CONNECTION ENDS-WITH INSULATION MOVE TO CONNECTION POINT CONDITIONS-INSULATION UP TO TWO INCHES IN LENGTH
FFH	U	MAA	MWHAI02	MWHSS01	22	SPAGHETTI,SLIDE STARTS-WITH REACH TO SPAGHETTI INCLUDES-ALL THE MOTIONS NECESSARY TO SLIDE SPAGHETTI UP OR DOWN WIRE ENDS-WITH SPAGHETTI MOVED FROM ONE TO THREE INCHES CONDITIONS-SPAGHETTI UP TO TWO INCHES IN LENGTH
FFH	U	MAA	MWHMTXX	MWHTM01	285	TERMINAL,MOUNT TO CHASIS STARTS-WITH REACH TO TERMINAL INCLUDES-ALL THE MOTIONS NECESSARY TO GET TERMINAL AND TOOL AND MOUNT TERMINAL ENDS-WITH TOOL TOUCHING TERMINAL PART CONDITION-APPLICABLE TO SNAP LOCK TERMINAL OR TERMINAL MOUNTED WITH SCREW
FFH	U	MAA	MWHRUXX	MWHWRXX	VARIABLE 160 124	WIRE,ROUTE THROUGH WIRES STARTS-WITH LEFT HAND HOLDING WIRE NEAR WIRES THROUGH WHICH LEAD WILL BE THREADED INCLUDES-ALL MOTIONS REQUIRED TO GET,PLACE AND ASIDE TOOL AND ROUTE LEAD UNDER OR BETWEEN OBSTRUCTING WIRES ENDS-WITH WIRE ROUTED AND TOOL ASIDE CONDITIONS-WIRE,12-16 GAGE CASE 01 ROUTE WIRE THROUGH WIRES WITH TOOL 1ST OBSTRUCTION 02 ROUTE WIRE THROUGH WIRES WITH TOOL EACH ADDITIONAL OBSTRUCTION
FFH	U	MAA	MWHSMXX	MWHWSXX	VARIABLE 125 83	WIRE,STRIP END STARTS-WITH GET STRIPPER INCLUDES-ALL MOTIONS REQUIRED TO GET,PLACE AND ASIDE STRIPPER AND STRIP ONE WIRE END ENDS-WITH TOOL ASIDE CONDITIONS-WIRE,12-16 GAGE,MANUAL STRIPPER CASE 01 STRIP WIRE END-FIRST LEAD END 02 STRIP WIRE END-EACH ADDITIONAL LEAD END
FFH	U	TUA	MWHTCXX	MWHWT01	76	WIRE,TIN LEAD END STARTS-WITH IRON AND SOLDER IN HAND INCLUDES-ALL THE MOTIONS AND PROCESS TIME TO TIN A WIRE LEAD IN PREPARATION TO CONNECTING WIRE TO A TERMINAL ENDS-WITH SOLDER AND IRON TWO INCHES FROM LEAD WIRE

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWMSTDP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
NF	U	MAF	2649	MWHWU01	35	WIRE(OR SOLDER),UNROLL FROM SPOOL,SIX INCH LENGTH STARTS—WITH REACH TO END OF WIRE ON SPOOL HELD IN HAND INCLUDES—ALL MOTIONS NECESSARY TO GET END OF WIRE AND UNROLL SIX INCHES ENDS—WITH RELEASE OF WIRE WITH ONE HAND AND THE SPOOL IN THE OTHER HAND
NAA	U	NAA	BWRLLXX	BWRLLXX	VARIABLE	LETTER,WRITE,LONGHAND STARTS—(CASE 01) WITH WRITING INSTRUMENT IN CONTACT WITH WRITING SURFACE.(CASE 02) WITH WRITING INSTRUMENT WITHIN ONE INCH OF THE WRITING SURFACE INCLUDES—ALL MOTIONS NECESSARY TO WRITE ONE LETTER ENDS—WITH WRITING INSTRUMENT IN CONTACT WITH THE SURFACE
					15	CASE 01 WRITE ONE LETTER,LONGHAND,LOWER CASE
					23	02 WRITE ONE LETTER,LONGHAND,UPPER CASE
NAA	U	NAA	BWRLPXX	BWRLPXX	VARIABLE	LETTER,PRINT,UPPER OR LOWER CASE STARTS WITH WRITING INSTRUMENT WITHIN ONE INCH OF WRITING SURFACE INCLUDES—ALL MOTIONS NECESSARY TO PRINT ONE LETTER ENDS—WITH WRITING INSTRUMENT IN CONTACT WITH SURFACE
					18	CASE 01 PRINT ONE LETTER,LOWER CASE
					23	02 PRINT ONE LETTER,UPPER CASE
NAA	U	NAA	BWRM001	BWRM001	8	INSTRUMENT(WRITING),MOVE TO NEXT WORD WHEN WRITING LONGHAND,LOWER CASE STARTS—WITH WRITING INSTRUMENT IN CONTACT WITH WRITING SURFACE AFTER FINISHING PREVIOUS WORD INCLUDES—MOVING INSTRUMENT LESS THAN ONE INCH AND GETTING IT INTO POSITION FOR WRITING NEXT WORD ENDS—WITH INSTRUMENT READY FOR WRITING NEXT WORD CONDITION—WHEN THE DISTANCE BETWEEN WORDS IS ONE INCH OR MORE A BASIC PLACE ELEMENT IS REQUIRED TO MOVE THE WRITING INSTRUMENT TO THE NEXT WORD
FFH	U	NAA	BWRN001	BWRN001	18	NUMBER,WRITE,PER DIGIT STARTS—WITH THE WRITING INSTRUMENT WITHIN ONE INCH OF THE WRITING SURFACE INCLUDES—FORMATION OF A DIGIT ENDS—WITH WRITING INSTRUMENT IN CONTACT WITH THE WRITING SURFACE
FFJ	U	NAA	BWRPSXX	BWRPAXX	VARIABLE	PUNCTUATION,ANNOTATE STARTS—WITH WRITING IMPLEMENT WITHIN ONE INCH OF STARTING POINT INCLUDES—MOVE TO WRITING SURFACE AND FORMATION OF PUNCTUATION MARK ENDS—WITH WRITING IMPLEMENT IN HAND IN CONTACT WITH WRITING SURFACE CONDITIONS—NOT APPLICABLE TO PRECISE PRINTING USE ONLY WITH ORDINARY WRITING OR FREEHAND PRINTING
					8	CASE 01 FORMATION OF A PERIOD OR DOT
					10	02 FORMATION OF A COMMA,APOSTROPHE,LINE OR DASH
					17	03 FORMATION OF A COLON,SEMI-COLON,OR EXCLAMATION POINT
					19	04 FORMATION OF PARENTHESES,DITTO MARK, QUESTION MARK,OR SINGLE QUOTATION MARK
					29	05 FORMATION OF AN ASTERISK

DATA SOURCE	OCCUP-ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	TMU VALUE	OPERATION/ELEMENT DESCRIPTION
FFH	U	MAA	BWRMSXX	BWRSWXX	VARIABLE	SYMBOLS,WRITE STARTS-WITH WRITING IMPLEMENT IN HAND WITHIN ONE INCH OF STARTING POINT INCLUDES-MOVE TO WRITING SURFACE AND FORMATION OF SYMBOL ENDS-WITH WRITING IMPLEMENT IN HAND AND IN CONTACT WITH WRITING SURFACE CONDITIONS-NOT APPLICABLE TO PRECISE PRINTING ONLY WITH ORDINARY WRITING OR FREEHAND PRINTING
					17	CASE 01 FORMATION OF A CHECK MARK
					19	02 FORMATION OF MULTIPLICATION,ADDITION, EQUAL SIGN OR AMPERSAND
					25	03 FORMATION OF A DIVISION SIGN OR A SINGLE BRACKET
					33	04 FORMATION OF A PERCENT,DOLLAR OR RADICAL SIGN
					41	05 FORMATION OF A BRACE
FFJ	U	MAA	MWRDAXX	MWRDWXX	VARIABLE	DATE(CALENDAR),WRITE STARTS-WITH WRITING INSTRUMENT WITHIN ONE INCH OF FIRST DIGIT OF DATE,MOVE TO WRITING SURFACE TO WRITE DATE INCLUDES-WRITING DATE ENDS-WITH WRITING INSTRUMENT IN HAND AND IN CONTACT WITH WRITING SURFACE AT THE COMPLETION OF THE WRITTEN DATE
					136	CASE 01 PRINT UPPER CASE ALPHAS FOR ABBREVIATED MONTH AND NUMERICS FOR DAY AND YEAR
					122	02 WRITE LONGHAND ONE UPPER CASE AND TWO LOWER CASE ALPHAS FOR ABBREVIATED MONTH AND NUMERICS FOR DAY AND YEAR
					110	03 WRITE USING ALL NUMERICS AND TWO DASHES OR OBLIQUES
FFJ	U	MAL	MWRSL01	MWRSW01	224	SIGNATURE,WRITE LONGHAND,FIRST NAME,MIDDLE INITIAL,AND LAST NAME STARTS-WITH WRITING INSTRUMENT IN HAND WITHIN ONE INCH OF FIRST LETTER OF SIGNATURE,MOVE TO WRITING SURFACE TO WRITE SIGNATURE INCLUDES-WRITING SIGNATURE ENDS-WITH WRITING INSTRUMENT IN HAND AND IN CONTACT WITH WRITING SURFACE AT THE COMPLETION OF THE WRITTEN SIGNATURE
AE	U	MAW	SCCWRXX	MWRWWXX	VARIABLE	WORDS,WRITE OR PRINT,SEQUENCE OF FIVE WORDS STARTS-WITH WRITING IMPLEMENT IN CONTACT WITH SURFACE READY TO WRITE INCLUDES-ALL MOTIONS NECESSARY TO WRITE OR PRINT A SEQUENCE OF FIVE WORDS INCLUDING PUNCTUATION ENDS-WITH WRITING IMPLEMENT IN CONTACT WITH WRITING SURFACE
					465	CASE 01 WRITE OR PRINT FIVE WORDS IN A SEQUENCE USING UPPER AND LOWER CASE
					605	02 PRINT FIVE WORDS IN A SEQUENCE USING ALL UPPER CASE LETTERS

DEFENSE WORK MEASUREMENT STANDARD TIME DATA ELEMENTS

DATA SOURCE	OCCUP- ATION	QUALITY	SOURCE CODE	DWNSTOP ELEMENT	THU VALUE	OPERATION/ELEMENT DESCRIPTION
FF	U	MAA	TWRNCXX	TWRNCXX	TABLE	NUMBER,COPY FROM SOURCE DOCUMENT

NUMBER,COPY FROM SOURCE DOCUMENT
   STARTS—WITH LOOK TO SOURCE DOCUMENT IN CLOSE
      PROXIMITY,WRITING INSTRUMENT IN HAND NEAR
      SECOND DOCUMENT
   INCLUDES—LOOKING TO AND FROM DOCUMENT,READING
      NUMBER,AND WRITING NUMBER ON SECOND DOCUMENT
      OR PAD
   ENDS—WITH WRITING INSTRUMENT IN CONTACT WITH
      SURFACE AT END OF NUMBER

		DISTANCE EYE TRAVEL (IN INCHES)			
NUMBER(S) COPIED		5 A	10 B	15 C	20 D
1	A	40	50	60	70
2	B	63	73	83	93
3	C	86	96	106	116
4	D	109	119	129	139
5	E	132	142	152	162
6	F	182	200	219	238
7	G	207	225	244	263
8	H	232	250	269	288
9	J	257	275	294	313
10	K	282	300	319	338
11	L	307	325	344	363
12	M	332	350	369	388